The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1448.—Vol. XXXIII. LONDON, SATURDAY, MAY 23, 1863. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.

Mr. Crofts transacts business, in the way of PURCHASE or SALE, in every description of stocks, but particularly in BRITISH MINES, in no case departing from the position of a broker, at net prices. All orders meet with the utmost punctuality and zeal, and advice given as to the nature and eligibility of INVESTMENTS, when required. EXCHANGES OF STOCK effected on the most advantageous basis, subject only to one commission. *** BUYER of South Exmouth.

*** SELLER of 150 Quebrada, 31s. 6d. (50s. paid); 100 Dale (fully paid), 13s.; 120 Cwmbrane, 37s. 6d. (30s. paid); 100 North Minera, 4s. 6d.; 10 Great North Work, 21s. 6d.; all net.

MR. CROFTS' MINING CIRCULAR, No. 9, is published this day. Contents:—The Biography of a Mine, and a Moral. Reports:—New South Caradon, Cornubia Tin, New Wheal Martha, South Darren, Cefn Cilcen, and Wheal Uny. Miscellanea:—Holmbush, Bottle Hill, Dale, Wheal Crebor, Cwmbrane, Bilins, Quebrada, and North Downs.

*** Subscription, 21s. per annum; a single copy, six stamps.

Dated May 23, 1863.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE, at nett prices:—20 Arthur, 11s.; 10 Bottle Hill, 12s. 6d.; 3 Basset and Grylls, £28; 10 Bedford United, £3½; 5 Calvadnack, £7½; 20 Crebor, £5 15s.; 50 Cornubia; 20 Drake Walls, £2½; 20 East Wheal Russell, £4¼; 20 East Carn Brea, £7½; 20 East Rosewarne, £3¾; 15 East Grylls, £3½; 20 East Jane, £2; 10 East Caradon, £31¾; 100 Furze Hill Wood, 8s. 6d.; 50 Great Retallack, £⅜; 5 Great Wheal Fortune, £36¼; 20 Grenville, £5¾; 10 Glasgow Caradon, £4¾; 50 Gawton, 12s.; 100 Great Tregune, 3s.; 30 Hawkmoor, 3s. 6d.; 25 Kelly Bray; 20 Lady Bertha, 15s. 6d.; 20 Ludcott, £6; 20 Marke Valley, £7; 20 New Wheal Martha, £3½; 10 North Basset, £4¼; 10 North Buller, £7; 20 North Crofty, £4¾; 20 North Treskerby, £3⅞; 25 Pedn-an-drea United; 5 Tincroft, £19¼; 20 Wheal Edward, £3½; 20 Wheal Harriett, £3¾; 20 St. Just United, £3⅜; 50 St. Just Consols.

STOCK AND SHAREDEALER.—Mr. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.

TELEGRAPHIC MESSAGES to BUY or SELL Railway, Bank, Mine, and other Shares and Stocks, punctually attended to on commission, or at nett prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Eighteen years' experience.

(Two in Cornwall and Sixteen in London.)

Bankers: Union Bank of London.

Every information can be obtained on personal application or by letter, as to purchases and sales of mine and other shares, and the best investment for capital.

From the close proximity of his Offices to the Stock Exchange, as well as the Mining Exchange, Peter Watson is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.—May 22, 1863.

MR. LELEAN, 11, ROYAL EXCHANGE, LONDON, E.C., has FOR SALE the FOLLOWING MINING SHARES, free of commission:—

7 Bryn Gwiog.	5 Kitty (Lelant), £9.	25 Sortridge, 8s. 9d.
5 Basset.	40 Kelly Bray, 21s.	2 S. Wh. Frances, £88¼
5 Bedford United, £3⅝.	20 Ludcott, £5⅝.	70 So. Car. Hooper, 14s 9d
50 Buller & Basset United, 2s. 6d.	50 Lady Bertha, 15s.	2 South Basset.
10 Camborne Vean, 35s	10 Marke Valley, £7½.	15 Tincroft, £19 7s. 6d.
1 Condurrow.	5 Mary Ann, £16½.	5 Trelyon.
3 Cook's Kitchen, £26⅜.	250 North Minera. 3s. 9d.	50 Tamar Consols, 15s.
5 Cliff. Amal., £23¼.	1 New Seton, £117⅛.	35 Tolvadden, £2 8s. 9d.
30 Cardigan Cons., 17s. 6d.	5 North Basset, £4 8s 9d	25 United Mexican.
1 Devon Great Consols.	20 North Buller, £6¾.	100 Vale of Towy.
10 Drake Walls, £2 3s. 9d.	5 North Frances.	5 Vigra and Clogas.
5 East Russell, £4 6s 3d	15 North Downs, £2 1s. 3d.	75 Wh. Unity, 11s 3d (c.pd.)
10 E. Carn Brea, £7 13s 9d	5 North Roskear, £29⅞.	50 Worthing, 11s. 6d.
20 East Treskerby, £3½.	20 No. Treskerby, £3 16 3	1 West Seton.
25 East Grenville, 49s. 3d.	10 North Crofty.	5 West Caradon, £27½.
5 E. Caradon, £31⅞.	80 Nantees & Penrhiw, 5s.	5 West Condurrow.
1 East Basset, £101¾.	40 Pedn-an-drea, 20s. 6d.	1 Wheal Seton.
50 East Jane, 42s. 6d.	20 Pendeen Cons., £7¼.	10 Wh. Grenville, £5 13 9
20 E. Rosewarne, £3 8s 9d	20 Rosewarne Con., £13¾.	10 Wheal Prosper, 25s.
5 Grambler.	13 Rosewarne Utd., 35s.	20 Wheal Hearle, £13¾.
4 Great Fortune, £37.	1 South Caradon.	90 West Treveyan, 5s.
90 Gt. Retallack, 11s. 3d.	1 South Tolgus, £32½.	1 Wheal Buller, £65.
10 Gt. So. Tolgus, £5 3s 9d	2 St. Ives Consols, £30.	35 Wh. Harriett, £2 18s 9d
70 Garreg, 3s. 3d.	5 St. John del Rey, £54½.	20 Wheal Union, £4⅞.
50 Gt. Wh. Neptune, 12s 6d	5 Stray Park, £38¾.	10 Wheal Crebor, 72s. 6d.
		20 Wheal Edward, £3 1s 3d

I advise the immediate purchase of Rosewarne United, West Condurrow, East Rosewarne, East Treskerby, and St. Ives Consols.

N.B.—Mr. Lelean requests that all shares for sale be sent in on Thursday evening the latest, to insure their insertion.—May 22, 1863.

MR. E. BEAZLEY, MINING AND GENERAL BROKER,
1, BANK CHAMBERS, LOTHBURY, LONDON, E.C.

E. Beazley recommends for Immediate Purchase, for Investment, North Roskear, North Crofty, East Chiverton, North Pool, New Seton, East Seton, East Carn Brea, and Union.

JOSEPH GREGORY, STOCK AND SHAREBROKER,
2, HATTON COURT, THREADNEEDLE STREET, LONDON, E.C.
Commission on purchase and sale of mining shares, 1¼ per cent.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ percent.—Bankers: London and Westminster Bank.

MR. H. WADDINGTON, MINING AND SHAREBROKER,
20, THROGMORTON STREET, LONDON, E.C.

The coming prize is Seton, the best dividend (copper) mine in the West. West and South Tolgus shares should be bought; the points about coming off will probably cause a great rise.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bryn Gwiog, £28¾.	East Gunnis Lake, £1¼.	Okel Tor, £3¾.
Bottle Hill, 14s. 6d.	Gawton United, 10s.	Roskearnowth, £8⅞.
Calstock Cons., 17s. 6d.	Glasgow Caradon, £4⅛.	Tincroft, £19⅝.
Clifford Amalga., £22¾.	Great Fortune, £36¼.	West Maria, 35s.
Crelake, 17s. 6d.	Great North Downs, £27⅝	Wheal Seton, £245.
Condurrow, £122.	Hawkmoor, 6s.	Kitty (St. Agnes), £7⅜.
Cwmbrane, £2.	Hingston, £3.	Wheal Edward, £3 1s. 3d
East Carn Brea, £7⅞.	Marke Valley, £7.	Wheal Grylls, £28¼.
East Basset, £104.	North Basset, £4¼.	Wh. Kitty (Lelant), £8¾
E. Rosewarne, £3 10s.	North Minera, 3s.	Wheal Crebor, £3½.
East Caradon, £32.	North Treskerby, £3⅞.	Wheal Margaret, £51¾.
East Devon Con., 5s. 6d.	North Roskear, £29⅛.	Wheal Ludcott, £6½.

And is a BUYER of:—

East Russell, £3⅝.	South Tolgus, £49.	Wheal Basset, £67½.
Devon Great Con., £510.	East Basset, £100.	Tolcarne.

May 22, 1863. Bankers: Bank of London.

MR. THOS. THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

Mr. Thompson has the means of obtaining the very first information, and is fully capable of giving the best advice, either for investment or speculation.

MR JOHN METHERELL, MINE SHARE DEALER,
2, BIRCHIN LANE, CORNHILL, LONDON, E.C.

Mr. J. Metherell, having been practically engaged in mining for the past 30 years, is enabled to give sound advice as to dealing in shares.

Telegraphic orders punctually attended to.

JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, LONDON, E.C.

James Hume's "Circular" for May contains special and authentic reports on Seton Crebor, North Buller, New Wendron, East Basset, Drake Walls, &c., with advice what to buy. Single copy, 6d.; subscription, 5s. per annum.

Bankers: London and Joint-stock Bank.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 16 years), has FOR SALE at nett prices:—2 South Frances, £5; 25 Grenville, £5⅞; 100 Gawton, 9s. 6d. 200 Redmoor, 4s. 6d.; 20 North Buller, £6⅞; 20 Wheal Uny; 15 Tincroft, £20; 100 East Martha; 50 Calstock Consols, 19s. 6d.; 100 Dale, 13s.; 50 Drake Walls, £2¼; 3 East Basset, £102¾; 25 North Crofty, £5; 2 Wheal Margaret, £30½; 45 North Downs; 1 Wheal Seton, £245; 30 Harriett, £3¼; 2 Stray Park, £38; 50 Crebor; 50 Kelly Bray, 17s. 6d.; 50 Hingston Down; 100 Prospidnick; 100 South Condurrow, 8s.; 100 Wheal Emma, 28s.; 50 Great Wheal Martha, £4; 100 Hilogan, 32s.; 150 Wheal Pollard, 8s.; 3 Grambler, £13; 5 Caradon Consols; 70 Great Retallack, 7s. 6d.; 5 Long Rake; 150 North Pool, £3 11s. 6d.; 100 Garreg, 2s.; 25 East Caradon, £31⅞; 35 Santa Barbara, 12s. 6d.; 75 Tamar Consols, 14s. 6d.; 100 North Minera, 8s. 6d.

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.

In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

15 Aberffryd.	5 Ludcott, £5 16s. 9d.	3 Stray Park, £38¾.
1 Basset, £72.	20 Marke Valley, £6 8s. 9d.	30 So. Car. Hooper, 14s.
3 Bryn Gwiog, £27⅞.	1 Mount Pleasant.	1 South Basset, £7½.
20 Bottle Hill, 10s.	10 North Basset, £4¼.	20 South Herodsfoot.
20 Buller and Basset, 3s 6d	10 North Buller, £6½.	30 St. David's, 3s. 9d.
5 Cliffd. Amal., £23¼.	20 North Treskerby.	3 St. Ives Consols.
3 Cook's Kitchen, £26½.	100 New Wh. Martha (fully paid).	50 Tincroft, £19 11s. 3d.
5 Caradon Consols.	50 North Rhine.	30 Treweatha, 21s.
20 Caradon Hill, 27s.	50 New Prospidnick, 7s 6d	50 Tamar, 12s. 9d.
30 Carnewas.	20 North Dolcoath, 36s. 3d.	5 Tolcarne, £3¼.
20 Camborne Vean, £1¾.	2 New Seton, £125.	30 Tolvadden.
20 Calvadnack, £6 15s.	5 North Roskear, £28 4s.	50 Utd. Mexican, £6 17s 6d
20 Crelake, 20s.	5 North Frances.	50 Vale of Towy.
30 Cefn Cilcen.	100 Nova Scotia, 16s.	50 Worthing, 10s. 9d.
2 Copper Hill, £33½.	50 Nant-y-Iago.	1 Wheal Seton, £254.
20 Drake Walls, £2 1s. 9d.	50 Montes Aureos, £2 13 9	2 West Caradon, £28.
100 Dale, 12s. 9d.	30 New S. Caradon, 12s.	1 West Sharp Tor.
50 Don Pedro No. del Rey.	20 No. Downs, £2 1s. 3d.	50 Wheal Union, £4 15s.
20 E. Clogau (5s. paid).	50 North Busy, 15s. 6d.	50 Wheal Unity, 10s. 9d.
10 East Carn Brea, £7 18 9	30 North Robert.	20 Wh. Grenville, £5¾.
1 East Basset, £102.	5 North Crofty, £4 11s 9d	1 West Seton, £243.
50 East Seton, 8s. 6d.	20 North Pool.	30 West Treveylan, 4s.
10 E. Rosewarne, £3 8s. 9d.	3 Polbreen, £14.	20 Wheal Ellen.
10 East Russell.	10 Pendeen, £7 10s.	10 Wheal Uny, £6 12s 6d.
1 East Pool.	1 Providence, £42.	20 Wh. Harriett, £3 1s 3d
30 East Grenville, 47s. 6d.	50 Prince of Wales.	5 Wheal Grylls.
10 East Caradon, £31 7 6	70 Port Phillip, 31s. 6d.	20 Wheal Hearle, £1⅞.
10 East Grylls.	20 Pedn-an-drea, 19s. 9d.	1 Wh. Margaret, £31.
30 East Martha (fully pd.), 18s. 9d.	20 Prosper United.	50 Wheal Pollard.
50 Glasgow Caradon Consols, £4¼.	30 Quebrada.	2 Wheal Buller.
50 Gt. North. Cop., 4s.	20 Rosewarne Utd, 25s.	20 Wheal Crebor, £3½.
1 Great Fortune, £35⅝.	10 Rosewarne Consols.	1 Wh. Trelawny, £16 6 9
10 Great Wheal Vor.	8 Roskearnowth, £8¼.	20 Wheal Emma.
10 Gt. So. Tolgus, £5⅛.	30 Rosewall Hill, £3.	2 Wh. Friendship, £97½.
2 Grambler, £11¼.	50 Redmoor, 2s. 9d.	30 Wh. Kitty (St. Agnes), £6 13s. 9d.
20 Gt. Retallack.	1 South Caradon, £410.	10 Wh. Kitty (Lit.), £8⅝
20 Great Caradon, £2 1s 3d	20 S. Carn Brea, £3 13s 9d.	5 Wendron, £10 16s. 3d.
30 Hingston Down, £2 19 6	30 St. Just United.	10 West Stray Park.
50 Hilogan, 32s. 6d.	1 South Frances, £87.	100 Yudanamutana, £3 12 6
50 Kelly Bray.	10 South Phœnix.	20 Wheal Prosper.
5 Long Rake, £17 15s.	100 St. Day United, 20s. 6d.	50 Wheal Norris.
50 Lady Bertha, 15s. 9d.	50 Santa Barbara, 13s. 9d.	10 West Chiverton.
20 Lelant Consols.	10 St. John del Rey, £54¾	10 Wheal Caradon, 25s.
	10 Sithney Carnmeal.	

And is a BUYER of 5 Bryn Gwiog, 5 Wheal Buller, 200 Vale of Towy, 100 Treweatha, 40 Hingston Down, 5 Wheal Mary Ann, and 100 East Russell.

2, Adam's-court, Old Broad-street, May 22, 1863.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.

Commission on share transactions 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

MR. EDWARD COOKE, SHAREBROKER,
75, OLD BROAD STREET, LONDON, E.C. Advice given on application on the merits of the various mines currently dealt in.

BUYER of any part of 5 Devon Great Consols at £507½ (ex div.), and 50 Ludcott at £5¾ nett, and cash on receipt of transfer.

SELLER of 20 East Carn Brea, £8.

MR. GEORGE BATTERS strongly recommends his friends to buy Tincroft, West Chiverton, Chiverton, Herodsfoot, South Carodon, and Devon Great Consols for investment. These shares will pay good interest for money at present quotations.—5, Cowper's-court, Birchin-lane, E.C.

MR. BATTERS PUBLISHES a DAILY STOCK, SHARE, and MINING CIRCULAR containg particulars of all movements in Bullion, Foreign Exchanges, Consols, Foreign Stocks, Railways, Mines, &c., and can be had by his clients free, on application.—5, Cowper's-court, Birchin-lane, London, E.C.

WEST CHIVERTON.—The investing public (hitherto excluded from participating in the profits of this valuable property from the fact that, till now, it has been worked privately by a single individual) can obtain shares through the advertiser at 20½l., at which price dividends at the rate of about 20 per cent. per annum may be confidently expected, independent of future discoveries.

5, Cowper's-court, Birchin-lane, E.C. G. BATTERS.

NORTH CROFTY.—This mine is destined to occupy ere long a first place in the list of the successes of the rich Dolcoath district.

5, Cowper's-court, Birchin-lane, London, May 22, 1863. G. BATTERS.

ILLOGAN MINES.—Already discoveries of importance have been made. The locality is the best in England, being under the shadow of Carn Brea Hill. Management the same as Tincroft. Shares should be bought.

5, Cowper-court, Birchin-lane, London, E.C. G. BATTERS.

MR. WILLIAM BARTLETT, STOCK AND SHAREDEALER, 12, ST. MICHAEL'S ALLEY, CORNHILL, LONDON, E.C., has the following SHARES FOR POSITIVE SALE, at nett prices:—

4 South Basset, £7¼.	10 South Gorland, £1⅝.	3 Caradon Consols, 15.
50 Great Caradon, £2⅜.	150 Wheal Emma, 32s. 6d.	3 Trelawny, £17.
2 Mary Ann, £16.	1 Wheal Seton, £247½.	5 Crane, £17¼.
1 South Tolgus, £52½.	20 East Carn Brea, £8.	100 Wheal Ida, 6s. 3d.
50 Kelly Bray, 16s. 6d.	2 Nangiles, £11½.	5 Wheal Curtis. £2¼.
20 Great So. Tolgus, £4 19s	5 Cook's Kitchen, 27s. 8d.	20 Tincroft, £19⅝.
20 So. Cara. Hooper, 14s. 6d	2 Grambler, £10¼.	10 Wheal Union, £4¾.
25 North Dolcoath, 40s. 3d	50 Hilogan, 32s. 6d.	2 Long Rake, £16¾.
1 Margaret, £30¾.	20 East Chiverton, £5½.	20 Wheal Uny, £6⅞.

Business transacted at the closest possible prices, on commission of 1¼ per cent.

WILLIAM ALLISON, STOCK, SHARE, AND MINING BROKER, 29, AUSTINFRIARS, LONDON, E.C.

Orders to buy or sell, accompanied by references, punctually attended to.

MR. G. D. SANDY, SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., has the following SHARES FOR SALE:—

3 Clifford Amalgamated.	5 East Caradon.	10 North Treskerby.
1 Condurrow.	20 East Carn Brea.	5 South Crofty.
3 Cook's Kitchen.	30 East Grenville.	2 Stray Park.
2 Copper Hill.	45 East Rosewarne.	3 West Frances.
30 Drake Walls.	15 Great South Tolgus.	25 Wheal Edward.
3 East Basset.	5 Great Wheal Fortune.	15 Wheal Grenville.

Daily price list forwarded on application.

GEORGE RICE, SHAREBROKER, 1, FINCH LANE, CORNHILL, LONDON (20 years' experience).

SPECIAL BUSINESS, at close prices, as BUYER or SELLER, in all market mines. Speculators and shareholders in mines continually miss the chance of making profits, and instead incur enormous losses by not taking a little "private" advice before buying or selling. George Rice can advise as to East Caradon, East Carn Brea, Crebor, Roskear, North Treskerby, East Rosewarne, Tincroft, and other market mines.

Money advanced on mining shares.

May 22, 1863. Bankers: Bank of London.

WHEAL CREBOR, AND WHEAL HARRIETT.—Parties wishing to know the "real" merits of these mines, and whether shares should be bought or sold, can apply to Geo. Rice for a few "facts," and his "private" advice.

May 22, 1863.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREBROKERS, 2, ADAM'S COURT, OLD BROAD STREET, AND MINING EXCHANGE, LONDON, E.C. (Established Ten Years.)

TRANSACT BUSINESS in BRITISH AND FOREIGN MINING SHARES and OTHER SECURITIES at closest prices, nett or on commission, but not being DEALERS only execute orders confided to them.

Telegraphic messages to buy or sell shares of every description promptly executed for immediate cash, or the fortnightly settlements.

Messrs. Ward and Jackman are BUYERS of 50 Wheal Harriett, or any part, for immediate delivery and payment, at £3 2s.

Commission, 1¼ per cent. on all transactions.

May 22, 1863. Bankers: London and Westminster, Lothbury.

MESSRS. T. P. THOMAS AND SON, MINING AGENTS, GENERAL SHAREDEALERS, AND AUCTIONEERS,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER,
3, PINNER'S COURT, OLD BROAD STREET, LONDON; and
16, HACKINS HEY, LIVERPOOL.

Now ready, SPECIAL REPORTS of East Basset, North Buller, Wheal Grenville, East Grenville, Wheal Harriett, and East Rosewarne, for the sum of 5s. the whole. These reports are by an eminent practical miner, and should be consulted without delay.

NOTICE OF REMOVAL.

MR. FRANCIS G. LANE has REMOVED to No. 2, ROYAL EXCHANGE, LONDON, E.C., where all communications are in future to be addressed. The following SHARES FOR SALE, at nett prices:—

5 North Roskear, £29.	20 St. Just United, £3⅝.	2 Long Rake, £18.
25 Wheal Edward, £3⅞.	25 St. Just Cons., 14s. 9d.	25 East Caradon, £32.
50 East Russell, £4¼.	25 East Carn Brea, £7½.	5 Tincroft, £19⅜.
50 North Minera, 4s. 3d.	20 Caradon Vale, £4¼.	40 New Treleigh.

BUYER of 200 New Wheal Martha, £2½; 50 Great Retallack, 4s. 9d.; 100 Great Moelwyn Slate, 38s. 6d. Bankers: London and County Bank.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C., SHARES in MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MR. JOHN R. PIKE, 3, PINNER'S COURT, OLD BROAD STREET, LONDON, has FOR SALE the UNDERMENTIONED SHARES, at nett prices, and all calls paid:—

1 Copper Hill, £83.	100 Crelake.	20 New Treleigh, £1.
2 Craddock Moor.	20 Crowiwm, £1.	20 North Buller, £6 5s.
12 Dyfngwm, £9 10s.	15 E. Carn Brea, £8 7s. 6d.	50 North Dolcoath, £2.
1 East Basset, £102 10s.	50 E. Grenville, £2 6s. 6d.	100 Pedn-an-drea, £1.
4 Great Fortune, £35 5s.	25 East Providence.	50 North Great Work.
10 Marke Valley, £7 5s.	100 E. Rosewarne, £3 11s. 3d	100 North Minera.
3 West Caradon, £27 15s.	25 East Russell, £3 7s. 6d.	3 North Roskear, £30 5s.
15 Gt. So. Tolgus, £5 5s.	24 Gawton, 11s. 3d.	100 North Robert, 12s. 9d.
25 Kelly Bray, 19s. 6d.	3 Gramb. & St. Aub., £13¾	50 Redmoor, 7s. 6d.
1 Buller, £54.	100 Great Retallack, 6s. 6d.	25 South Caradon Wheal Hooper, 13s. 9d.
25 Alfred Consols, 17s. 9d.	50 Hawkmoor.	40 Hingston, £2 18s. 9d.
4 Billins.	50 Lady Bertha, 15s. 6d.	100 St. David's, 10s. 6d.
50 Bottle Hill, 9s. 9d.	25 Maudlin, £1 10s.	20 St. Just United.
100 Bryambor.	50 New South Caradon.	10 Trencrom.
50 Carn Camborne.		100 Trimley Hall.

RICHARD CLIFT, MINE SHAREDEALER, late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, on commission only, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. Horley and Co. publish a Weekly Mining List, with the closing prices every Wednesday, and will be most happy to forward the same (gratis) on application.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 31, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on all transactions.

HENRY GOULD SHARP'S RAILWAY, BANKING, AND MINING CIRCULAR,
(Gratis and post-free)

Should be CONSULTED by the PUBLIC before INVESTING. It contains reliable information and advice to capitalists, REPORTS on MINES, RECORD of MARKET PRICES, and is the only "SAFE GUIDE" for the investment of capital.

Offices, 32, Poultry, London, E.C. Established 11 years.

WHEAL UNITY.—SHARES WANTED in this mine, for immediate cash.—Sellers will please state number and lowest price to Henry Gould Sharp, 32, Poultry, London, E.C.

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MR. BRENTON SYMONS, MINING ENGINEER, SURVEYOR, &c., has RETURNED FROM CORNWALL, and may be consulted as usual at 18, Hatton-garden, London, E.C.

Original Correspondence.

COAL-CUTTING MACHINERY.

SIR,—Mr. W. P. Shield and others have recently written some letters in reference to coal-cutting machinery at West Ardsley. It is not our intention to engage in a newspaper controversy upon the subject, for, after all, the invention must stand or fall by the actual quantity and quality of work which it is capable of performing; but we should feel obliged by being permitted shortly to say in reply to those communications—

1. That Mr. Shield has never seen the machinery about which he writes.
2. That the results which he confidently predicts could not, and cannot, possibly happen in practice.

Men who really desire to understand the merits of an invention generally take an opportunity of seeing it at work, and large numbers of the most eminent gentlemen connected with the mining interest in England and Scotland have visited West Ardsley for that purpose, not one of whom has expressed to us an unfavourable opinion in respect to our operations.

Leeds, May 20. FIRTH, DONISTHORPE, AND BOWER.

SELECTION OF COALS FOR SMELTING PURPOSES.

SIR,—Mr. Child tells us in his paper, read before the South Wales Institute, that sulphur in coal is usually met with as bisulphide of iron (iron pyrites), or as a complex compound with carbon, hydrogen, oxygen, and nitrogen, and that it is only in the case of its existing as pyrites that it is deleterious to the quality of the iron, whilst Mr. Cox flatly contradicts this assertion, and in proof mentions the fact that the rock coal of Pontypool, which is described by the Admiralty as full of pyrites, produces the highest priced iron in the principality, and that the old coal at Pentwyn, which is equally full of pyrites, produced likewise a high class quality of iron. Mr. Child alludes to the use of coal in its raw state in some of the Merthyr furnaces, and refers to the use of anthracite as being difficult, owing to its decrepitating under blast. Mr. Cox advocates coking the coal, and watering it before introducing it into the blast-furnace, and with this recommendation I should generally agree.

I am inclined to think that, especially where the coal is not too bituminous, the advantage of coking is enormous; and with regard to the rock coal of Pontypool, I see no reason why the coke produced should not be practically free from sulphur. During the process of coking the pyrites, or bisulphide of iron, which is insoluble in water, would become converted into a soluble sulphate, which upon the watering of the coke would be washed out, leaving the coke free from the deleterious ingredient referred to. Now, in the case of a very bituminous coal, the whole of the bisulphide *might* not have been changed into a soluble salt by the time the coking is completed, and, consequently, some of the sulphur would remain unextracted. In the same way the sulphur in the Ebbw Vale coal may not exist in such a form that calcination would make it soluble; and the sulphur would, consequently, also remain. Now, I think that if it be admitted that it is the sulphur which must be got rid of, the ironmakers of South Wales should abandon the notion that the deleterious effect of that substance is dependent upon its being originally in the form of pyrites or otherwise in the coal, and turn their attention, after having first ascertained the precise form in which the sulphur exists in the coal, to the removal of the sulphur, either by elimination in the form of gas or by converting it into a soluble compound, which will be removed by the watering of the coke. A comparatively limited knowledge of chemistry brought to bear in this way will, I think, save many ironmasters much inconvenience; it will enable them to learn whether and by what means the sulphur can be best removed, providing it can be removed, which is not always the case; or whether it is desirable to abandon the hope of producing first-class iron, and turn their attention to making *quantity* of common iron repay them for their outlay.

May 19. EISENSTEIN.

USE OF PEAT FOR SMELTING IRON.

SIR,—I have not any intention of entering into a dispute with Mr. Vincent Lee as to whether or not I have much or little knowledge of the subject on which I wrote to you some time since, and on which I find his comments in the *Mining Journal* of last week; nor have I any inclination to compete, as an authority, on this subject with him, or with "such an iron smelter," whose name he does not give. The "dogmatism" to which Mr. Vincent Lee objects is simply a statement of my opinions as to the use of peat in smelting—opinions derived from a large experience of the utilisation of peat. They are given without qualification, since I make it a rule not to express an opinion on a subject till I have decided views with regard to it. If those opinions are erroneous, Mr. Lee is, of course, quite at liberty to bring forward evidence to prove them so; but, so far as I am concerned, I should expect some stronger, or rather more trustworthy, evidence than that afforded by the accounts of the peat-made iron of Creevelea. When evidence opposed to the opinions I have expressed as to the use of peat in lieu of coal for smelting iron is produced, those who take sufficient interest in this subject to examine into it, and who may be competent to form opinions for themselves, will be the proper judges as to which view is correct. To use Mr. Lee's own words, "We shall see."

In reference to the offer received by Mr. Lee, from the *incognito* smelter in Wales, to take 100 tons, or a 1000 tons, weekly of his peat or peat charcoal, I have no doubt as to the possibility of such an offer being made; but I have very serious doubts as to the capability of Mr. Lee, or anyone else, to supply such a quantity at such a price as no doubt will have been made a condition in the offer.

In regard to the Creevelea Ironworks, I need only say that my enquiries as to them in the *Mining Journal* of the 2d inst. are still unanswered. Mr. Lee is quite wrong in supposing I have jumped to a conclusion from the statement that coal workings "are being laid open;" I have only asked for information on a subject of interest. There are, no doubt, many who could afford the information I asked, and who would, by furnishing it, throw much light on the subject.

Mr. Buchan's judgment in resorting to coal appears to me to have been very sound, and, according to Mr. Lee's account of the state of things at Creevelea, a few weeks ago, there does not appear to have been much improvement resulting from the peat-preparing apparatus, which, from the statements that have been made, one might be led to suppose had been erected there.

I quite agree with Mr. Lee in his statement that the only impediment to the general adoption of peat is that of not being able to produce it at a cost to make it commercially advantageous. No one conversant with the subject can doubt this for a moment. B. H. PAUL.

8, *Gray's Inn-square.*

MECHANICAL PUDDLING.

SIR,—The invention of Messrs. Dumény and Lémut, alluded to in the communication of "H. W. H." in the Journal of May 9, is worthy of consideration, as once more directing attention to the subject of mechanical puddling, but beyond this I do not think the invention has much to recommend it. The idea that in a machine perfection must result from the nearest possible imitation of hand labour, or, in other words, by making the machine attempt to use the workman's tools instead of the workman himself, is erroneous; and with regard to Messrs. Dumény and Lémut's mechanical puddler, the design is incomplete, without a glass door for the attendant to watch the progress of the operation, and an easy chair to recline in until the charge is ready to draw. There is no instance on record of an invention having proved successful in which it has been attempted to work with the tools previously employed; thus we have a stocking loom bearing no similarity to the ordinary knitting needles with which our grandmothers manipulated, and a paddle-wheel in no way resembling the ordinary oar. Had the attempt been confined to endeavouring to cause three or four needles to dance about like an old woman can make them, we should not have worn machine-made hose by this time; and, on the same principle, had inventors done no more than connected the oars of an old Roman trireme and applied a steam-engine to the connecting-rod, we should never have had speed, although steam-engines of the most perfect kind should have been applied to them.

In Messrs. Dumény and Lémut's invention there is no advantage whatever, for each machine only does the work of one man, and requires a man to look after it, so that there is the cost of the machine and of keeping it in repair, in addition to that of the man for working it; there would probably be a saving of 6d. per day in the man's wages, and an additional cost of 2s. 6d. to obtain the same quantity and quality of iron. But although I regard the mechanical puddler of Messrs. Dumény and Lémut to be practically useless, I believe that the time has arrived when hand labour in puddling may be dispensed with, and the remarks contained in the article published in last week's Journal—the Puddling of Iron by Machinery—are certainly entitled to consideration, so far as regards the suggestion to employ enlarged egg-whipping machines, or Schroder's pans, to which might also have been added Stevens's bread-making machine, which I believe will be found more applicable than either; but when it is stated that the puddling hook must be the starting, I disagree with the writer. A modification of Stevens's bread machine would have the advantage that the furnace could be made of any length, and upon the iron coming to nature the claws could be turned up, and the iron balled and drawn as usual.

As the masters are really in want of a good mechanical puddler, I may hint that a long furnace should be made, and the fires placed diagonally by the side; the metal as it runs from the blast-furnace should be received into the puddling-furnace, and puddled without cooling; by this means the full charge of two or more blast-furnaces could be puddled at once, and wrought-iron thus obtained direct from the ore. I feel convinced that this description of furnace would answer, although, as it is not patented, any ironmaster might adopt it free of all royalty. C. D. J.

CYANOGEN, AND IRON MAKING.

SIR,—Although too much importance cannot be attached to the selection of coal for the blast-furnace, I do not exactly understand how the experiments either of Mr. Child or of Mr. Cox (alluded to in the report of the proceedings of the South Wales Institute of Engineers in last week's Journal) are likely to prove of any real utility to the practical iron manufacturer, although they are without doubt very interesting in a theoretical point of view. At first glance it would appear that the two gentlemen differ widely from each other in the opinions they entertain, but it is soon found that they perfectly agree in the only point upon which it is essential that they should differ for their disputation to become valuable to the ironmaster: they both agree that the fitness of coal for the blast-furnace cannot be judged of by inspection, and that it does not follow because a coal contains more or less than a given percentage of sulphur that *therefore* it is applicable or inapplicable for smelting purposes. In fact, there are so many ifs and buts used on both sides that the practical man is left much in the position he was before.

For my own part, I believe that neither Mr. Child's nor Mr. Cox's experiments prove anything of importance, for neither the accurate percentage of the sulphur (for both gentlemen say that the prejudicial effect of coal upon iron depends upon the combination in which the sulphur exists, and not upon the quantity) nor the quantity of copper deposited from the ash are the particulars which it is desirable should be known, all that the ironmaster cares about being whether a certain ore smelted with a certain coal will produce a good iron, and if not whether the iron or coal can be so treated as to bring about the necessary change to produce the desired result. Sulphur is doubtless one of the most difficult ingredients which has to be dealt with, and, consequently, it is of paramount importance that it should be got rid of as speedily as possible, or, which is the same thing, that it should be neutralised. The only method in my opinion of ascertaining whether the iron ore and coal at command will produce good iron is to try them in the furnace itself; if the iron be bad, or of such a quality that better is desirable, the ore, the coal, and the resulting iron may be analysed, and the necessary conclusions can then very probably be drawn.

Should sulphur be found to be the deleterious ingredient, its removal or neutralisation will, of course, be the first consideration; and then we come to something in Mr. Cox's remarks which is worth attention, although I do not feel inclined to give him the credit of any discovery. He surmises that the sulphur may be neutralised by cyanogen, and this is really little more than re-asserting what has long since been published by Christopher Binks, Frémy, and several others. Binks was doubtless the first to propose the introduction of cyanogen compounds into the blast-furnace, and the excellent results obtained by Frémy were brought about by a similar process. This appears to me to be the really important point in Mr. Cox's remarks; he leads us to the inference that if the sulphur which would otherwise deteriorate the value of the resulting iron is not neutralised by the constituents naturally existing in the materials introduced into the blast-furnace, the wished-for change will probably be secured by the introduction of— CYANOGEN.

SILVER AMALGAMATING MACHINERY.

SIR,—I read a communication in last week's Journal from Mr. H. Sewell, bearing upon a letter of mine published by you some time ago, relative to silver amalgamating machinery. I then stated, as is quoted by Mr. Sewell, that "I was not able to find a set of good amalgamating machinery for silver ores, or introduce a single improvement in their treatment beyond what is already known in the Republic." I regret to say that a residence of nearly four months in England, a visit to Germany and some of the first mining and metallurgical machine establishments in Europe, have not been sufficient to induce me to change or alter that statement. Not being personally acquainted with Mr. Sewell I beg, through the medium of the Journal, to offer my best thanks for his kindness and the readiness, disinterested in the highest degree, with which he has come forward, not only for my information, but that of the public, and given the details of the system of amalgamation for gold and silver ores as practised at Chili. I quite agree with Mr. Sewell that, *so far as is generally known or understood at the present moment*, the system he so clearly describes is *about* the most perfect. Still that does not in any degree refute my statement, for Mr. Sewell is perfectly well aware that the Argentine Republic adjoins that of Chili, and that the system he describes as having been in operation at Copiapo so many years could not possibly be a secret to us, their next door neighbour. On the contrary, I could show Mr. Sewell among the archives of my department at the Government House in San Juan the documents, plans, and drawings pertaining to the patent granted to an Argentine citizen for an *improved* amalgamating machine, on the principle of the "Copiapina," and with which machine, now in operation at San Juan, a quantity of silver has been extracted, and is, I believe, at the present moment working up one cajon (about 3 tons) daily. I had the *tubs*, &c., constructed in Buenos Ayres for the owner, and forwarded them to San Juan.

Mr. Sewell was good enough to inform me, in his first letter, where I ought to go in order to see amalgamating machinery, &c., at work, naming Copiapo and other places in South America. A few years since I visited nearly every mining establishment of note in Chili, Peru, and Bolivia, and am thoroughly acquainted with their different modes of working, and in nearly all of which I believe there was much room for improvement.

I have recently had constructed a species of *tub* amalgamator, which, so far as I can judge, is likely to produce satisfactory results; but it is not my intention to say anything of its merits until I shall have thoroughly proved its efficiency. I have no prejudice in favour of or against any particular machine, and only seek for the one that will extract the largest percentage of the silver present with the least possible loss of mercury, and in every way the most economical.

F. IGNACIO RICKARD, F.G.S., &c., Major,
Government Inspector General of Mines, Argentine Republic, South America.
Consulate General of the Argentine Republic, London, May 19.

THE NEW METAL—THALLIUM.

SIR,—As we are all desirous of securing all the honour and fame to which we are entitled, I may take the opportunity of referring the readers of the *Mining Journal* to a few remarks which were printed over my initials, dated July 21, 1857, and bearing upon a paragragh published the previous week, announcing the discovery of what I have now no doubt was the metal thallium; at the same time I must express my sincere regret for having written in such disparaging terms of Mr. Joseph Jones's discovery, more especially as I believe he was a man without means or friends, and consequently unable to substantiate his claims, and secure the advantages and fame to which he was entitled. The paragraph, with reference to which I wrote, was the following:—

SULPHURIUM.—Mr. Joseph Jones, of Bolton-le-Moors, states that he has discovered the perfect metal sulphurium, which is of the same class as arsenium, silver, aluminium, &c. Oxide of sulphurium is the refuse of the manufacture of sulphuric acid or brimstone, and has no commercial value, persons being paid for carting it away. In its refuse condition it has almost the specific gravity of iron, and the atoms are very fine, malleable, ductile, &c.

Now, I think few can read this notice without concluding that the merit of having first discovered the metal which is now, by general consent, called "thallium," is that to which Mr. Jones alludes as having even in 1857 already discovered. That Mr. Jones was inaccurate in describing the new metal as "sulphurium," or the metal of sulphur, I admit; but we must remember that even within the last five years the science of chemistry has much progressed, and that evidence which the most experienced chemist would in 1857 have received as conclusive would now be objected to as requiring very much further confirmation before being regarded as the proof of a fact. We must remember, too, that Mr. Jones could not have had the advantage of making the spectrum analysis, which led Mr. Crookes to the discovery, and that, consequently, the obstacles which Mr. Jones had to surmount in order to give even the outline contained in the above notice of the nature of the metal, were infinitely more numerous than those which Mr. Crookes could have had to encounter. Whether Mr. Joseph Jones be still living I know not; if he be I trust that he will derive any benefit which may accrue from the discovery.

When I wrote in 1857 I remarked that I did not consider that chemistry had reached anything like the perfection that it would attain, but rather that at a future time our notions on the subject would be regarded with as much ridicule as we regard the attempts of the alchemists to produce gold by combining and manipulating various baser metals, yet I confess that I then little thought that I should so soon have to regard my own views as to a new metal from sulphur residue as so supremely absurd. It is true that Mr. Jones did not give such ample particulars as could have been wished, although it would now appear pretty certain that he possessed them, but there is no doubt that he, seeking rather profit than fame, withheld them in the hope of finding a capitalist to aid him in turning his discovery to commercial advantage. In 1857 I suggested, from Mr. Jones's description of his discovery, that he might have produced an impure potassium which he had mistaken for a new metal, and designated sulphurium; but I am now inclined to believe that his greatest error was in regarding the metal as the actual metal of sulphur, instead of simply a new metal, occurring in combination with certain sulphide ores.

May 19. E. D. H.

BUBBLE COMPANIES, AND GRAND REPORTS.

SIR,—Letters have appeared in the Journal from Mr. Naysmith and other correspondents, justly complaining of the evils which are inflicted upon the enterprising and speculative public by the false and overdrawn reports of sanguine or incompetent agents, and suggesting the establishment of a Society at Aberystwith, to counteract or correct these evils. Such a movement would, no doubt, be productive of beneficial results, so far as the locality embraced by the Society's operations was concerned, but unfortunately the evil exists, more or less, in all our mineral districts, and any remedial measure, to be effectual, must be general.

There can be no question that legitimate enterprise is suffering, and is doomed to suffer still more, owing to the number of worthless schemes which are being palmed upon the public. Speculations are being manufactured by the score, in which those who are unfortunate enough to embark will never again see a shilling of the capital they have invested, much less of any interest. Yet such are the present facilities for the formation of joint-stock companies, and so great the desire for speculation on the part of the public, that almost any scheme, embodied in a plausible prospectus, and accompanied by two or three "good and grand" reports, is sure to command a certain amount of success. Hence it is that unscrupulous adventurers, taking advantage of these circumstances, seek to fill their own pockets at the expense of others. But when we consider that the manufacture of a public company is now a process so simple, while the object to be gained by the promoters is often so considerable, we need scarcely wonder that men are found to embark in such an enterprise. The first step in the scheme is to select, and obtain the lease of, a piece of ground in a district where gold, silver, lead, iron, coal, or slate are known or supposed to exist, and if near a prosperous concern all the better. Two or three flaming reports are then procured from neighbouring captains or agents. A secretary is obtained, with the promise of a permanent appointment and a liberal bonus, on condition of his introducing some names on the direction. One provision is made for the payment of a large sum to the promoter for a lease, which costs him nothing. Directors are allured either by the promise of paid-up shares or liberal fees. The matter is then brought out, advertised extensively, and pushed in every direction. Shares are taken, the company is launched, and the promoter has pocketed some thousands by the scheme. Operations like these are not few and far between, but are of almost daily occurrence, and the applications to aid in the formation of these companies are so frequent as to become a great nuisance to professional men, whose names are known in the mining world.

But, it will be asked, how are the public to distinguish between the legitimate and profitable enterprise and these worthless schemes? The reports which are embodied in the prospectus *ought* unquestionably to be the guarantee. They are put forward as the unbiassed evidence of impartial and competent men, and if they were always what they profess to be, the public would have all they could require to enable them to form a correct judgment. But, unfortunately, mining agents are, as a class, so sanguine that they often deceive themselves as well as others, while in too many instances their reports are made more with reference to the requirements of those by whom they are employed than to the real merits of the case. We all know that amongst our mining agents there are men of ability and integrity upon whose judgment we could with confidence rely. What we require is a medium of communication between these men and those who invest their money in mining enterprises—some organisation by which the adventurer could ascertain whether the names attached to these reports were those of able, honest, and reliable men. A society on such a basis as Mr. Naysmith recommends would do much to meet the case; but to be extensively useful it should have its head-quarters in London, and branches in all the mineral districts. It should be composed of men of high character, standing, and ability, who should be considered responsible to the society for the *bona fides* of their reports. If such a society could be established it would foster and encourage legitimate enterprise, and do more than anything else to expose the hollow and worthless schemes which are concocted to delude the inexperienced and the unwary.

12, *Buckingham-street, Strand.* C. STUART BARKER.

CARDIGANSHIRE MINES, AND LEGITIMATE MINING.

SIR,—How kind of "C. T." to take Mr. Naysmith under his wing. "C. T." is going to begin a new rush. Beware! ye mine agents of Cardiganshire! He is not going to pursue any doubtful policy towards you, but he is *resolved* to analyse your reports, and insist that the facts bearing upon the lodes shall be set forth and described in scientific phraseology. I do not care a farthing myself, for I am used to all that sort of thing; but I feel for my countrymen, who are about to undergo this discipline so suddenly at his hands. It is quite plain that it will be no laughing matter, for he begins by stating that the men who, for the most part, report upon our mines ignore all the recognised principles of scientific investigation—only think of that! I suppose this relates to "C. T.'s" principles of science, some of whichare very curiously set forth in his fulminating letter. What poor ignorant creatures we Cardiganshire mine agents are! We do not know anything whatever of the position, the strike, the dip, the age, or the constituents of the rocks in which we work, notwithstanding that we take thousands of tons of lead out of them. "C. T." can examine them from Carmarthen, but we who work in them know nothing at all about them; the rock may be, like the moon, made of green cheese, so far as we know. Can anything exceed the self-sufficiency of these would-be learned Thebans? They can descant upon miles of country with philosophic complacency, while they will not allow us credit for discernment of 100 fathoms of rock opened before our eyes. Cardiganshire, in the last thirty years, has advanced, so far as the mining districts are concerned, from a state of comparative desolation to one of active industry. Thirty years ago the house of the miner was a mere shed built by the hedge, and covered with thatch; the cow, if happily there were a cow, was an honoured inmate of the dwelling; the pig was not an unwelcome intruder, and the chicken from the key-beam with curious eye regarded the course of events below. Now the cottage is built of stone, and covered with slate, and the minor comforts are duly regarded. Thirty years ago Frongoch, the largest mine in the Lisburne district, only produced 16 tons of ore per month; and the whole of the Lisburne Mines were sold, with the machinery upon them, for 5000*l.*; Cwmystwith was abandoned by the Messrs. Alderson; and Darren, the only mine working in the silver-lead district, returned only 9 tons of ore per month,—in point of fact, at that time not one mine in Cardiganshire was working at a profit. But what has happened in the interim? There are now in round numbers 80 mines in this district; some of these have been brought into a state of profit, others are opening with varied progress, and with more or less chances of success; and only a limited number, possibly a dozen, by a qualified miner would be condemned as hopeless speculations. Upon these mines taken altogether—the profitable, the promising, and the worthless—the expenditure up to this time has been about 300,000*l.*, while the nett profits may be safely taken to be 60,000*l.* a year, or an interest of 20 per cent. per annum on the whole capital: but the part of this 300,000*l.* expended upon progressive mines, of which there are above 40, is not lost; this may be fairly estimated at 120,000*l.*, and I have no hesitation in saying that these mines are worth that money; in that case the capital of the profit-giving mines must be taken as 180,000*l.*, and the profits on this sum would amount to rather more than 30 per cent. per annum.

This, considering the stagnant condition of the mines 30 years ago, is not a bad state of things. These mines have divided in the period alluded to

about 700,000*l.*, and I estimate their value, exclusive of the mines of trial, to amount to 760,000*l.* For this state of prosperity I should be glad to know in how much we are indebted to "C. T.," with all his scientific *claptrap?* I can with pride refer to the fact that the mines of which I took charge in an unprofitable state I left in a profitable state; deficient as I was in science, I directed the levels into extensive formations of ore, and so constructed the machinery as to give profits that enhanced the mines in three years from a value of 7500*l.* to that of 40,000*l.* These were the Lisburne Mines, from the year 1833 to 1836. How much lead has "C .T." discovered in the course of his life? His qualifications, by his own showing, appear to be very great; it is a pity the public have only the benefit of knowing his initials. I answer to him so boldly, because my offence is indicated. I have perpetrated a map with pink zones, of which map the zones are a pure fiction, only constructed to serve my own purpose of puffing up a certain mine that has early come to grief. Did it never occur to "C. T." that mines are long-lived; that occasionally they recover from the lowest state of decline, and afterwards flourish through a long course of prosperity? The Cwmystwith and Lisburne Mines, in this country, are cases in point; they having in past times degenerated into the most abject poverty, and are now passing through a tide of unprecedented riches. But what a cramped mental organisation must that of "C. T." be; what a crabbed idiosyncracy to attribute to a man the design of altering the map of his country to suit his own private ends, especially when most of the mines in the country properly fall within the belts indicated as false. But it would take too much time to seriously refute these allegations; it will be enough to concede to "C. T." and his coadjutors that whenever he, or either of them, can show that he has brought one mine in Cardiganshire into a profitable condition, I would have no difficulty in receiving him as a preceptor; but, in the absence of any such qualification, I fear the doctrine he promulgates will not find much favour with the miners or the public. MATTHEW FRANCIS.

MINING IN THE HARTZ MOUNTAINS.

SIR,—Mining operations in the Hartz Mountains hold an anomalous position. The ownership of the metallic districts by the Crown of Hanover, and the absolute control exercised by the Government in the appointment of all engaged in superintending operations, and who are virtually Government *employés*, remove the mining operations of the Hartz out of the category of kindred enterprises in which free competition, with its attendant stimulants, is brought to bear upon results. The fact that the property of these mines is represented by *actions*, minutely subdivided, and held by a large number of private shareholders, is no check whatever on this absolute governmental control; for so little is a shareholder allowed practically to concern himself with undertakings present or projected, that he has actually to get a permit from the authorities to inspect any works in which he may be interested. Only between the masters and the labourers are there any relations of a business or official character acknowledged. The shareholders of a mine—the virtual owners of the metal raised—must abandon the yield, whatever this may be, to the Government authorities at a fixed price, which is from a third to a fourth below its commercial value. Out of the moiety thus assured the salary of the master-miner and wages of the workmen must be paid, and all incidental losses in carrying on the works be made good.

A word as to the singular relative position of the Hartz Mountains themselves. Rising abruptly from the surrounding plains, they appear to present very much the same physical conformation as the islands of Northern Europe. From Winenburg the hills form tiers of round and broken elevations, rising one behind another, until the Brocken is reached. In geologic structure they certainly present the greatest contrast possible to the surrounding country. This distinct character of the Hartz region of mineral wealth has imposed its own isolating influence on the population; the dwellers of the Hartz Mountains appear as completely separated in thoughts, feelings, and ideas as in occupation from the dwellers in the plains, and bear the impress of a peculiar social organisation. This organisation need not be detailed. It is sufficient to remark that, in the way of general classification, the population may be divided into miners, smelters, and charcoal burners. Columns of smoke rising from the belted woods mark the clearances where the charcoal burners pursue their vocation.

The Rammelsburg, which may be said to mark the centre of the chain, has been worked for at least 2000 years; records of operations carried on there in the twelfth century, and subsequently, are particularly ample. The mementoes of Roman work are still seen in bronze eagles and busts in the vicinity—mementoes that loom up out of the night of time, encrusted with strange associations. Rammelsburg and Goslar belong to the region of the lower Hartz. Clausthal, the capital of the higher Hartz, may be regarded as marking the centre of the metallic region; the works here bear evident traces of excavations dating as far back as the fourteenth century; notwithstanding, these mines yet yield a plentiful supply of iron ore.

Next to the sterile, bare, and blasted portions of the surface of these semicircles of mountains, lying above the thick woods, and skirted by foliage, the most striking objects to the traveller are the chimneys of the lofty air-furnaces, from which tall columns of incandescent flame are continually rising. The passage from one smelting establishment to another not uncommonly lies across ridges of gneiss and other azotic formations, apparently sustained by vast natural buttresses, which strike upon the eye like gigantic fortifications. The smelting works are situate on the banks of mountain streams, or beside vast artificial reservoirs, to which the waters are guided by means of tubes and tunnels of considerable length. The whole region of the Hartz, however, appears to maintain very much the aspect it wore centuries ago.

Whilst engineering science and the processes of reducing and smelting cannot be said to be altogether dormant, yet the resources of these mountains, which if properly worked would enrich the country, cannot be said to be put to full account, as they only serve to maintain an isolated and unprogressing population. The one supposed advantage of this necessitated isolation is that the available labour of the people can always be calculated on; but even the tramp of the iron steed would not startle the present generation out of its ideas and traditions; competition could never reduce their rate of labour, to which is to be superadded the value of a Government refuge provided for them in old age. During the French occupation, when the ephemeral kingdom of Westphalia came into existence, the works were far more pushed than at the present time. The chief concern of the Government being apparently to supply employment to the population rather than enlarge existing operations, no steps are taken to invite foreign enterprise, or to encourage investment of capital in these mines. The more recent discoveries of science are, to some extent, here and there applied to facilitate certain processes; but that most powerful of all agencies—the steam-engine—is in a stubborn adherence to old usages dating, perhaps, as far back as the Romans, viewed with disfavour.

The iron ore worked out in the Hartz is commonly dark, and interlined with sparkling and dun shades. The great proportion of this ore is smelted by hot blast, although the cold blast is occasionally employed. The blasting furnaces, which are built of granite, are of moderate size and span; they have each two or three breasts and fire-brick passages for the blast to enter. The hammering process is preferred for most purposes for which this iron is employed. A small amount of the key-steel formed from this iron finds its way to India and Morocco in short pieces of 100 lbs. weight. Latterly two large rolling-mills have been introduced into the Hartz.

The veins of gold in the Hartz hitherto explored and worked are in quartz, in which it is intermingled with varied proportions of ironstone, ochre, tellurium, and pyrites. The gold is occasionally visible to the naked eye. It is obtained in the first instance by blasting, and is extracted in the usual method by crushing and amalgamation.

In the lead mines the base of the cutting is the lode itself, a perpendicular shaft communicating with the galleries thus formed. The old works, dating centuries back, appear to have been very irregularly driven. Some of the shafts reach to an enormous depth, and the skill with which the sides are shored up is certainly a matter of admiration. The water does not flow into these mines in any great quantity, or from springs, but the deposit is rather from filtration. If there were a large quantity of coal available for steam-power, drainage might be far more easily effected. Under existing arrangements, no large sums will be expended on the Hartz Mines with a view to increased profits, and long and many-jointed pumps continue to perform all the work of elevating any water necessary for the clearance of the levels, or for raising it where required for the reservoirs. The base of the cutting, the commencement of those extraordinary galleries for which the Hartz are famed, is, in most instances, reached by an adit, horizontally driven from the side of the hill in which the lode occurs.

The machinery by which the workmen ascend and descend the shafts of the mines is very simple. Two square pistons of wood, with a series of small platforms on each, some feet from one another, are alternately elevated and depressed, so as to allow a miner standing on one platform to step on the platform at the opposite side, which, if he is ascending, carries him opposite the platform above that he has just left, and *vice versa*, if he be on his way down. For loosening the ore within the mines, blasting by gunpowder is had recourse to.

The more modern methods of treating argentiferous copper for the silver ore it contains are neglected in the Hartz regions, and in the Upper Hartz the old system of liquation is adopted. An alloy of lead being applied in the preparation of 11 parts to 3 of copper, the mass is heated more than sufficient to liquify the lead, which is then drained or sweated, to carry off with it the copper. So effectual is this process, that even when there is from 1-5 to 1-6 per cent. of silver in the black Hartz copper, the operation pays. The proportion of lead and copper which is to be employed in the process is, of course, previously determined. The operation of smelting is conducted in a cupola furnace; this, when well heated, is charged alternately with lead and copper, care being taken that each double charge shall fuse and flow out before a second enters on liquation. A circular iron mould, 18 inches diameter and 3 to 3¼ inches deep, receives the alloy, the cooling of which is facilitated by the water thrown from time to time upon it. The hearths employed in the process of liquation are of the most rudimentary form, consisting of two inclined walls, surmounted by iron plates, which also incline to one another, walls and plates presenting a central aperture. Circular plates of copper are then placed on their edges above, at set distances, in a perpendicular position, supported by corresponding plates of iron, all apertures and spaces between these plates being filled with charcoal. The leading aperture, formed by the structure of the furnace, leads to a basin. A moderate heat having been maintained up to the time when the lead begins to flow, the heat is increased by opening a fine and superadding more charcoal as long as the lead flows. To extract any remaining lead from the spongy copper (*kielmstocke*), the masses are piled in an arch-shaped furnace, and subjected to a strong heat, when the fused lead, as it rises in an oxidised condition, is precipitated into the canal below.

The furnace commonly employed in the process of refining is of a reverbatory character, built up in circular form of stone, with a circular cover made air-tight by clay, and which is placed and elevated by means of a crane. These furnaces are erected on solid foundations, the stones being pinioned by iron rods, which enter into and hold other portions of the structure. This fire-place is admirably suited for wood, the clear oxidising flame of which is preferable to coal. The hearth is saucer-like, and of a mixture of lime and clay. In the fire-places thus riveted together the pigs of lead are piled up as compactly as possible, and, the cover having been adjusted, is luted with clay. The crust of oxide and various earthy impurities are drawn off from a sliding door as they rise, care being taken to preserve to the lead its red colour. After the flow of cupreous lithage the blast is applied, and lithage proper forms at a stationary temperature. The oxides of lead, which at first impart dulness to the surface of the metal, are absorbed by the capel, and the resulting brilliance soon indicates that the silver has been sufficiently refined. The surface of the silver, in the process of cooling, is still kept open by stirring, to prevent any sudden expulsion of gas, up to the time when it is almost completely hardened. The application of water renders the mass solid. It is now hammered on an anvil, when any impurities that present themselves are picked out. The silver, when thus made ready for the Mint, is ·9948 to ·9965 in fineness. The average loss on refining may be set down at 7·05 per cent. The estimated cost of the process is 2½d. per pound. Great skill is invariably shown in the management of the heat and blast. When the litharge has attained any degree of fluidity the air is drawn in, and waves are formed by the draught. The litharge is then run into a number of large vessels, for in cooling *en masse* it is liable to assume that scaly condition attaching to the red variety. There is commonly 2 to 3 per cent. of lead in the silver that remains. The miner, judging by the brilliancy of the surface, throws water in to cool the cake, which is then drawn out by iron-bars. For a charge of 12 tons, on a hearth of as many feet in diameter, nearly three days will be required. The hearth is commonly afterwards broken up and fused in a reverbatory furnace to recover the silver. It should be added, that care is taken to reduce separately, or give back to the fusion for rich lead the early products of oxidation. The silver is collected and refined at Clausthal. The hearths on which the fusion takes place are formed by cutting a hollow several inches deep and 1 foot in diameter in leached wood ashes, properly dried in an iron form. This cuple is muffled with fire-clay, but, by a very simple arrangement, a current of air can pass over the surface of the test. An outside fire of charcoal brings the whole to a high heat. From 40 to 50 lbs. weight of the broken-up silver from the furnaces are placed in the crucible, where they fuse in two hours. The mass is now stirred, and the air commences to oxidise. Every two hours, from time to time, the process of stirring is repeated. C.

GOLD MINING IN WALES.

SIR,—Will you allow me to correct a few of the misstatements contained in Mr. Reay's last work of fiction, published in the Journal of Saturday. I will take them in the order he has put them. Mr. Mosheimer has not been compelled to give up the dry stamping, nor has he adopted any of Mr. Reay's clumsy processes; the stamps he has erected at Garthgell work admirably. Mr. Reay either has not seen a correct drawing of the stamps, or, if he has, he has misunderstood it, or he would not have considered them gimcrack. Mr. Mosheimer's pans, instead of doing a miserably small amount of duty per diem, are working and *extracting the gold* from a very fair quantity daily; they are not always breaking, and getting out of order; the gearing is not defective; they are not geared for all sorts of speeds, but run one uniform speed, and, therefore, following Mr. Reay's own style of argument, we may conclude they are geared by a man thoroughly "up to" and acquainted with his business. It can easily be understood that Mr. Reay is jealous of the success Mr. Mosheimer has achieved, and no doubt he finds relief in personal abuse; but he should remember that personal abuse is one thing, and untruth another. The unsettled manœuvres with the stamps which Mr. Reay writes about exist only in his own imagination. Mr. Reay asks if the shareholders are asleep? They are not. They aroused themselves in time to prevent the management of their mines passing into the hands of the man who believes in blankets and hides for extracting invisible gold, and amalgamation by pressure. The employment of this skilful reduction officer by five or six gold mining companies shows that confidence is placed in him, and that it is better to work than to write oneself into notoriety. Mr. Reay will, perhaps, be kind enough to mention in what way the introduction of this person to the county has led to the dismissal of Capt. J. Parry, and also from whom he obtained the information that his dismissal has made way for the intrusion of this Americanised German. "ME who has purchased silver ores for the Messrs. Taylor for 5½ years; ME. who has had the unweighed riches of gold of the St. John del Rey Mining Company in my possession," ought to be more particular as to the truth of what he writes. Mr. Reay has had one mine to work upon for six months; he has nothing to show as the result of his labours, so with a good grace he should give way to Mr. Mosheimer and those who can do better.—*Dolgelly, May* 18. R. D.

THE GREAT DEVON AND BEDFORD (COLCHARTON) COPPER MINING COMPANY (LIMITED).

SIR,—Many of the readers of the *Mining Journal* having become shareholders in this company, I shall feel obliged by your publishing the following reports.—11, *Tokenhouse-yard, E.C.* H. BROOK, Sec.

May 15.—Since the commencement of operations on the 21st ult., by setting ten men costeaning on the south-eastern portion of the company's property, close to the fence of the Wheal Crebor sett, during the same day a lode was met with of good size (2½ feet wide) showing congenial appearance—gossan, prian, quartz, peach, and mundic. On the 23d ult. we tried the north-western portion of the sett, and were successful in discovering a lode 3 feet wide, and of the same genial character as the former. Shoding was then commenced in the western portion of the sett, for the purpose of intersecting the various east and west lodes, and I have much pleasure in informing you that a lode of great size, fully 5 feet wide, has been met with, composed of an abundance of the richest possible gossan, light capels impregnated with copper, prian, and mundic, with a little yellow and black oxide of copper ore, and altogether presenting a magnificent lode, and which, in my opinion, cannot fail to be productive of ore at no great depth. Operations have since been continued on its course; and in the most extreme pit east the lode shows the same fine appearance as that described above. The country surrounding the lode is all that can be desired, being both easy for exploration and congenial for mineral. The further laying open of the lodes will be proceeded with as fast as possible, for the purpose of selecting the best position for shaft and permanent workings.—G. RICHARDS.

May 16.—I yesterday inspected the operations at the Great Devon and Bedford Copper Mine, and I have much pleasure in reporting that the proceedings are attended so far with all the good success that can possibly be expected. The workings are confined to shoding on the western extremity of the property to lay open the several lodes which evidently take their course through the sett, one of which has been cut and traced on its course east upwards of 70 fathoms. The appearances of this lode in the various pits are such that there can be but one opinion that a lode of such size, strength, and composition, will be most certainly highly productive of copper ore. It is from 5 to 6 ft. wide, composed of large quantities of gossan, quartz, mundic, capels, prian, and spots of yellow and black oxide of copper ore, in fact, possesses every good quality that can be expected at surface. I may safely say your course is clear, and would recommend you at once to commence a permanent engine-shaft, the result of which will be to lay open a great, rich, and lasting mine. I may here state that the cutting of this most splendid lode has caused much excitement in the neighbourhood, so much so that the Great Devon Consols Company has commenced costeaning on the course of the same lode up to the western boundary.—J. S. CHENHALL.

JOINT-STOCK COMPANY PROSPECTUSES.

SIR,—I think you may justly take credit for the great improvement generally observable in joint-stock company prospectuses, since you have given currency to the opinion that each such document "should contain a plain and complete statement of any engagements to purchase property of whatever kind;" because it has now become the rule to publish such indispensable particulars, rather than the exception. As, however, the evil is still apparent, you will, I hope, allow me to assist in its complete eradication.

Recent enquiries of Mr. A Beeston, secretary to THE LONDON GENERAL DEPOSITORY COMPANY (Limited), have elicited the information that the present tenant sells his "plant, fixtures, and goodwill for 850*l.*," and that "the estimate for iron and glass roof is 1400*l.*, but half of that amount will be paid in shares;" which statements, if they had been embodied in the prospectus, would have been serviceable, from the moderation of the sums mentioned, in promoting the success of the company.

On the same day (May 18) I addressed Mr. Frederick Rundall, secretary to THE MARGATE TERMINUS HOTEL COMPANY (Limited), asking what were the sums respectively required to pay for "the purchase of the property and site," and for "the building of the hotel," and what were the expected resources of the company, after paying those sums, and for furnishing, &c., with which to carry on the business, the proposed capital being 50,000*l.*? That request Mr. Frederick Rundall has not condescended to notice, possibly because he is ignorant of these bases of calculation, probably because, in his opinion, and with a thorough knowledge of the affair, an unreserved avowal might be injudicious, and certainly with intense confidence in the unquestioning faith of ardent subscribers for shares.—36, *Cannon-street, E.C., May* 22. J. LEE STEVENS.

LITERARY NOTICE.

A Dictionary of Chemistry, and the Allied Branches of other Sciences. Founded on that of the late Dr. Ure. By HY. WATTS, B.A., F.C.S., &c. London: Longman and Co., Ludgate-hill.

The third part of Mr. Watt's Dictionary is published, and its contents fully maintain the character of the former parts. It contains an excellent paper on Atomic Weights, which will be of interest to those who cultivate the more recondite parts of chemistry. Among practical subjects there are papers on the Atmosphere, the Barometer, Balances, and Beer, which will be found to contain a great amount of valuable and useful information. It cannot be expected that all the articles in the Dictionary are of a purely practical nature, for inasmuch as it is a dictionary of general chemistry, it must comprise subjects that are of interest only to the professed chemist, as well as those that are of general importance to industry. But it must be remembered that it would be impossible to determine what is of practical value in chemistry and what is only of scientific value. But a very short time ago a work on practical chemistry would have said nothing about aniline or benzol, or paraffin or aluminum. Now, these substances are the objects, or the materials, of immense manufactures, and a practical work on chemistry which did not treat fully of them would be very imperfect. In like manner we may reasonably expect that many of the substances that are now known only within the walls of the chemist's laboratory may ere long become familiar in the factory. In any case, Mr. Watts's Dictionary contains a trustworthy statement of the full extent of modern chemical knowledge, and those who require chemical facts of any kind, or for any purpose, will nowhere find those requirements satisfied so well as in this work, where they may select according to their case, and be sure they have recourse to a safe guide.

THALLIUM, AND ITS DISCOVERY.—Discoveries in chemical science now follow each other so rapidly, that the working chemist has almost ceased to be surprised at anything, and only hopes that in the course of his researches he may be fortunate enough to discover some novelty himself, which shall place his name upon the list of illustrious chemists, and secure him a reputation entitling him to be classed with such men as Faraday, Hofmann, Liebig, Fresenius, Mohr, Deville, Crace-Calvert, and others of similar position, whose labours have done so much for technical chemistry and the industrial arts. It is but a few months since that we alluded to the introduction upon a commercial scale of a large series of ordinary articles in domestic use in which aluminium (the metal of clay) and aluminium bronze had been employed as the substitute for white metal and plated goods; it was only in last week's Journal that we reviewed the interesting work of Prof. Crace-Calvert, detailing the history of the discovery of the brilliant colours derivable from coal tar, and of their application in connection with dyeing and calico printing; and there are many other instances to which we might refer in proof of the important services which the chemist has rendered to the manufacturer in every branch of our national industries. It is scarcely more than ten years since the Emperor of the French presented Mr. Pepper, the indefatigable manager of the Polytechnic Institution, with what was then considered a large ingot of the metal aluminium (it must have weighed at least ½ cz.), yet such have been the improvements made in the process of manufacturing it, that at that very Institution, where so recently so many looked upon this diminutive ingot as a marvel, the visitors to the first of a series of fashionable morning entertainments, which commenced on Saturday, might see not only aluminium ingots as large as pigs of iron, but alloys of the metal itself applied to a very considerable extent in the manufacture of watch-guards, various other articles of jewellery, table ornaments, and other articles, the appearance of which would bear comparison with the finest gold. On Saturday Mr. Pepper introduced for the first time his very interesting and instructive lecture on the metal "Thallium," recently discovered by Mr. Crookes, and which, although possessing apparently certain disadvantages as a metal, may yet be applied to some useful purpose. When aluminium was first isolated but few were sanguine enough to hope that it would become an article of commercial value, notwithstanding that it possessed some valuable properties; so that a more favourable opinion could scarcely be expected for thallium, which has the disadvantage of oxidising rapidly, being disagreeable in colour, and with difficulty obtainable. From these remarks of Mr. Pepper, it appears that some ten years since Mr. Crookes was entrusted by Dr. Hofmann with some sulphur residue, to extract the selenium, and this having been done, the remainder was put aside as containing tellurium. Some time after, tellurium being wanted, Mr. Crookes naturally went to the substance which had been put aside, and as in the meantime the discoveries of Bunsen and Kirchhoff had directed attention to spectrum analysis, Mr. Crookes employed his spectroscope to give him a more complete knowledge of the substance he was about to treat—he was surprised at the appearance in the spectrum of a brilliant green line, which he had never before seen. He at once assumed that it must be the indication of a new metal, and, continuing his researches, at length succeeded in isolating the metal, and in obtaining several of its salts. In the course of his lecture Mr. Pepper carefully traces the mode in which the several steps in the discovery were made, and gives a very conclusive proof of the certainty and accuracy of spectrum analysis; concluding by remarking that even if it cannot be advantageously employed in the manufacture of some useful alloy, it may be made valuable for pyrotechnic purposes, a beautiful green light being produced by it, which far surpasses anything that can be obtained by the use of barium. Mr. Ladd, the well-known instrument maker, had deposited some spectroscopes, that the visitors might examine the characteristic lines which the new metal gave, in the intervals between the several entertainments which were given in the course of the morning; amongst which we may mention the description and explanation of some of the principal scientific and philosophical instruments by Mr. King as an instructive and amusing one.

Meetings of Mining Companies.

ST. JUST UNITED TIN AND COPPER MINING COMPANY.

A special general meeting of shareholders was held at the offices of the company, on Wednesday, to confirm the resolution passed at another special general meeting, for the purpose of raising additional capital.

Col. BUSH in the chair.

The CHAIRMAN moved that the following resolution, passed at the special general meeting, on May 5, be confirmed:—"That the present share capital of the company be increased by the issue of 2000 shares, of the same value as those at present existing—2*l.* 10*s.* each."—Carried unanimously.

It was then resolved that the 2000 new shares be offered to the shareholders *pro rata*, according to their present holdings; and that 10*s.* per share be paid upon each on application, and 10*s.* on allotment, the remaining portion to be called up as required.—Carried unanimously. Shareholders representing 1265 shares were present, and proxies representing 3598 were forwarded from the country shareholders, many of whom were present at the first meeting.

The MANAGER explained that many of their country friends could not attend both meetings, but the number of proxies clearly indicated their concurrence in the object of the present meeting; and that the plan for raising the additional capital had been well received was clearly evinced by the rise that had taken place in the price of shares; and the report read from the captain as to the progress of the undertaking left no doubt in the minds of all present that early and profitable results will attend the further development of the property.

A vote of thanks was passed to the Chairman, when the proceedings terminated.

EAST CAMBRIAN GOLD MINING COMPANY.

A numerously attended meeting of shareholders took place at the company's offices, on Thursday—Mr. M. C. SETON in the chair.

The CHAIRMAN stated that the amount of capital subscribed was less than was anticipated, which having been represented to the vendors, they had come forward in a very liberal spirit, and made a material reduction in the purchase money. It now stands as follows,—500*l.* in cash, and 1000*l.* for preliminary expenses (which were very heavy), and 3000*l.* in shares, and some extra payments dependent on the contingencies of further capital being subscribed and profits being made. The directors had taken the opinions of two practical men (Mr. C. R. Dixon and Capt. Faull), as to the amount of capital that would be required to develope the mine, and by their reports (which were read by the secretary), it appeared that the company had sufficient capital subscribed to thoroughly prove the mine. The directors having thought it courteous to the shareholders to lay these matters before them, previously to proceeding to allotment, had convened the meeting for that purpose.

Mr. J. HORSCOP (one of the directors), stated that everything would be conducted in the most economical manner, and that the directors had agreed to forego all fees for the first twelvemonth.

The following resolution was then adopted:—"That this meeting, having heard the terms of the new arrangements made by the directors, for purchasing a lease of the mine for twenty years, cordially approve thereof; and request the directors to carry the same into execution, and to proceed to the allotment of shares, and commence operations with all possible speed."

A vote of thanks to the Chairman terminated the proceedings.

GREAT WHEAL BUSY UNITED MINING COMPANY.

A special general meeting of shareholders was held at the company's offices, Austinfriars, on May 15,—Mr. PINNER in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting.

The CHAIRMAN said the shareholders had assembled together in pursuance of the resolution unanimously passed at the general meeting recently held on the mine (the details of which have appeared in the Journal), for the purpose of considering and determining the mode of dividing the two properties possessed by the shareholders in Great Wheal Busy United, so that henceforth each property may be carried on as two separate adventures. At the meeting held on the mine—which, by the way, was very numerously attended—this important question was fully discussed, and the resolutions proposed received the unanimous approval of all present. This special meeting, therefore, was of a formal character, for the purpose of passing resolutions to give effect to the determination come to at the general meeting. The committee had already received replies from by far the largest proportion of the shareholders, fully approving of the plan; but he might, perhaps, mention that the object the committee had in putting forward these propositions was this—it would be remembered that, when the present company was first started, it was considered that a capital of 60,000*l.* or 70,000*l.*, would be required to drain the mine, and to put it into an effective state of working. Although something like 90,000*l.* had been expended by the company, Great Wheal Busy proper, it was to be remembered, had not cost much more than 60,000*l.*, for about 20,000*l.* had been expended upon a mine called Hallenbeagle, partly with a view of relieving Great Busy of a portion of its water, but with the more special object of practically testing the intrinsic value of the property. Operations were continued at Hallenbeagle for three or four years, when, owing to other mines to the east not being worked—therefore, the water could not be commanded—and successful results not having been attained, that mine was abandoned. Attention was then turned to the mine called Boscawen, upon which there had been expended something like 12,000*l.* Deducting, therefore, those items from the total amount expended upon the united properties, Great Wheal Busy proper had not cost more than was estimated. He had stated these facts to show his fellow-shareholders what had induced the committee to propose a division of the sett, for hitherto the cost of opening these two unproductive mines had been charged to Great Wheal Busy, and, consequently, a loss had been shown of about 1000*l.* per month, whereas the fact was by far the greater proportion of that loss during the past six years had resulted from the developing of Boscawen, which had not yet arrived at that point where it could be expected to be remunerative. In the meantime, the entire property was much depreciated in public estimation, although the prospects at Great Busy and Boscawen were considerably improving. The committee thought if these mines—each of which was quite sufficient for any body of adventurers to undertake—were divided it would put Great Busy proper into its proper position, and henceforth present to the adventurers and the public its actual financial condition, which hitherto had not been the case. As regards Boscawen, there was every reason to expect that would soon produce profitable results. The adoption of this plan would also enable holders, so desirous, to part with a portion of their interest. He had already mentioned that the meeting on the mine unanimously approved of the proposition; but he might further state that when the proceedings were terminated, several local shareholders said they would not then take for their interest in either mine what they would have taken the day previously in the united properties. Since that meeting the lord's agent had been communicated with upon the subject, and he had met the company's surveyor, Mr. Henderson, and the agent upon the mine, and an agreement had been come to as to the boundary line between Boscawen and Great Busy. If the resolution he was about to submit were adopted, Boscawen would be divided into the same number of shares as those in Great Busy, and each holder in Great Busy receive the same interest in Boscawen as he at present held in Great Busy, and in future each property would stand upon its own merits. Having made these few observations, he would read over the resolutions which the committee proposed to submit. The first and primary resolution was to the effect that the part of Great Wheal Busy formerly called New, or North, Hallenbeagle, and now, and for some time past, known as Boscawen Mine, be, as from Feb. 28 last, divided from Great Wheal Busy, and that the same be treated and carried on as a distinct and separate adventure, under the name of the Boscawen Mining Company.

The resolution having been duly seconded, was put and carried unanimously.

A SHAREHOLDER knew the question he was about to put was premature, but, at the same time, he should like to know if the recent change had yet had any perceptible effect upon the market value of the shares?

The CHAIRMAN said his answer to that enquiry was this—that just at the present moment no holder would sell, unless a great temptation were held out to him, because each mine just now presented unusually encouraging indications. The committee were told, by a letter received that day, that it was not only the confident opinion of the agent, but also that of other practical authorities in the locality, some considerable discovery would shortly be made in the western part of Great Busy. Under those circumstances, no shareholder, who could possibly prevent it, would at present dispose of any portion of his interest.

Several resolutions of a formal character were submitted, and unanimously carried.

A SHAREHOLDER suggested that the two mines should be presided over by the same committee, for no persons could be better qualified to watch over and control the working of the new system. The object of these resolutions was to put each mine upon its own proper footing, and that each should bear its own burden, and depend upon its own merits. There was no doubt in his mind that they had seen the worst of their days, and that in three months hence both Great Busy and Boscawen would present a much more favourable aspect than at the present time.

The SECRETARY, in answer to a question, stated that nearly 5000 shares were represented at the present meeting.

Dr. MATHEW said he considered the resolutions just passed the most important step that had been taken since the formation of the company. From all the information he had been able to gain, he believed there was good reason for hoping that Great Busy proper, relieved from the costs of the adjoining sett, would soon be in a paying condition; while in Boscawen the fine course of ore gone below the 60 fathom level had been traced for 45 or 50 fathoms in length, and Capt. Trelease, who had minutely examined the lode, valued it at from 25*l.* to 40*l.* per fathom. The 70 end, it appeared, was just touching the course of ore, and, although it was not more than 4 or 5 in. wide, yet for that width it was all solid ore. In a few fathoms, there was no doubt the person part of the lode would be reached, when the whole of the 60 fm. level bottom would be drained, by which the manager would be enabled to sink winzes, and cut out the ground. If the

bunch of ore continued in depth, this part of the mine would ultimately be a very profitable speculation.

The SECRETARY, having replied to several enquiries, stated that he had great pleasure in congratulating his fellow-shareholders upon the important step which they had agreed to take, for he fully agreed with the unanimous opinion expressed by the shareholders at the meeting on the mine, that they might now confidently look forward to Great Busy and Boscawen each soon entering upon a long and successful career. The local shareholders, he might mention, looked with considerable interest to the cutting of the run of ore at the 70 in Boscawen, and at deeper levels; and it should be borne in mind that the produce of Boscawen was much higher than the average of the county, and, therefore, would not suffer from the depreciated standard so much as those mines which produced a low quality ore. The perseverance displayed and the capital expended upon this run of mines by the Great Busy adventurers certainly merited, and he believed would soon reap, success, and he thought that the time was not far distant when each property would command a good commercial value.

A resolution was then unanimously passed, appointing the secretary and committee of the Great Busy Company to conduct the affairs of the Boscawen Mining Company; and the committee were empowered to make such arrangements for the management and working of the said company as they may think proper and most beneficial to the interest of the adventurers.

A vote of thanks to the Chairman was then proposed, when the proceedings terminated.

PROVINCIAL BANK OF IRELAND.

The annual general meeting of proprietors was held on Thursday, at the London Office, 42, Old Broad-street,—Mr. M. W. ATTWOOD in the chair.

The notice convening the meeting having been read,

Upon the proposition of the CHAIRMAN, Messrs. T. Chapman, F.R.S., J. Farrar, M.P., J. Fletcher, and Sir J. W. Hogg, Bart., were re-elected directors.

Mr. THOMAS HEWAT (the secretary) read the following report and statement of accounts:—In making their report to the proprietors at this time, the directors have to express their regret that they cannot speak in favourable terms of the condition of Ireland. Four adverse seasons in succession from the year 1859 have necessarily operated injuriously upon the circumstances of the numerous class of small farmers, and this has, of course, affected the retail trade of the country. The summer of 1862 was more than usually wet and ungenial, and the cereal crops were inferior, and very much below an average. The potato crop was more productive than that of 1861, but was still under an average in quantity, and it was in some instances on the south-west coast nearly a total failure. It was, however, generally of good quality, and in that respect was better than for many years past. While, however, the season was thus unfavourable to the agricultural and trading interests, it is satisfactory to be able to state that the distress which was so prevalent among the poor and labouring classes throughout the previous year was much mitigated during last year by the low price of food and greater abundance of fuel. In the linen trade the past year was satisfactory, for though the home sales were affected by the depression which has existed in some of the manufacturing districts of England, the export trade in linen goods considerably increased. Flax spinning was in consequence active and prosperous throughout the year, and the high price of flax rendered it fairly remunerative to the farmer, though it was not a productive crop. The value of money was low throughout the year. The fluctuations in the minimum rate of the Bank of England were considerable, having ranged from 2 to 5 per cent., but the average rate of the whole year was under 3 per cent. Under the circumstances which have been thus briefly stated, the directors consider they have every reason to be satisfied with the result of the bank's operations for the past year, as shown in the following statement, to which they now request the attention of the meeting:—

The account submitted to the yearly general meeting in May, 1862, showed the amount of rest, or undivided profits, March 29, 1862, to be						£255,048	19 9
Out of which there has been paid to the proprietors the amount of two ordinary and extraordinary dividends, as follows:—							
At Midsummer, 1862—							
Ordinary dividend of 4 per cent.	£21,600	0	0				
Extraordinary dividend of 6 per cent.	32,400	0	0	= £54,000	0	0	
At Christmas, 1862—							
Ordinary dividend of 4 per cent.	21,600	0	0				
Extraordinary dividend of 6 per cent.	32,400	0	0	= 54,000	0	0	= £108,000 0 0
Leaving a balance of						£147,048	19 9
To which there has since been added the amount of nett profits for the year ending on the 28th, being the last Saturday of March, 1863, after deducting property tax, and providing for all bad and doubtful debts..						103,864	9 9
Making the rest, or amount of undivided profits, March 28, 1863 ..						£250,913	9 6

Although this statement exhibits a somewhat smaller amount of profit than was realised in the previous year, the directors have the satisfaction of intimating that it is their intention to continue the same rate of dividend, and they accordingly propose to pay, in July next, an extraordinary dividend of 30s. on each 100*l.* share, and 12s. on each 40*l.* share of the capital stock of the bank, in addition to the ordinary dividend of 4 per cent., making the amount to be then paid 2*l.* 10s. on each 100*l.* share, and 1*l.* on each 10*l.* share, for the half-year ending at Midsummer next. They will, also, as heretofore, pay the property tax for the proprietors.

The CHAIRMAN, in moving the adoption of the report, said that was the account they had to submit to the proprietors of their proceedings, and the result during the past twelve months; and it was a subject of great satisfaction to the directors that they had to congratulate the proprietors on the state of their affairs, which, although not so prosperous and brilliant as on former occasions, was still highly satisfactory, because they must always remember that this bank, extending its branches as it did throughout the whole of Ireland, necessarily to a great extent depended on the general state and prosperity of the country in which its operations were conducted. They were, no doubt, aware that it had been the case during the last three years that the population of Ireland had suffered very much from the depressing effects of three bad harvests. During this spring, however, the prospects had been more favourable, and he hoped the present year would exhibit a better state of affairs than the preceding three had done. It was, perhaps, very difficult for any one who did not pay so much attention as the directors of the bank felt it their duty to do to the affairs of Ireland to conceive the injurious effect which such disasters as these successive bad harvests produced: indeed, they had been so marked that public attention had been called to the subject by the complaints that had been made. This was shown by the fact that the amiable Lord Lieutenant of Ireland, the Earl of Carlisle, had caused enquiries to be made into the character of the existing sufferings, with a view to ascertain whether they were likely to permanently injure the prospects of the country, or whether the injury was of a temporary character. The result of that investigation was very satisfactory; and the opinion formed by the gentlemen entrusted with making the enquiries was the same as that of the directors of the bank, that the depression arose from the deficiencies in the harvests, and that the general resources of the country remained nevertheless unimpaired; but they might well have expected that the sufferings occasioned by the three disastrous harvests would have been worse, for the gentlemen who had made the enquiries, to whom he had already referred, had made a calculation on this subject, which calculation showed the loss in respect of the harvests in the three years had amounted to 26,000,000*l.*, and that was equal to two years' rental of the whole country. Therefore it was natural the country should suffer, and it was a matter for congratulation that it had suffered so little. He, therefore, could fairly congratulate the proprietors on this examination into the state of the country and the results it had produced. It would be impossible for him to look back at the former state of Ireland without contrasting it with the present, and pointing to the beneficial improvements that this bank and similar institutions had effected in the country. It was extraordinary to contemplate this great growth in the improvement in the condition of Ireland within the last forty years, and it was impossible to do so without connecting that progress with the banking institutions of the country. They must remember that their branches formed the reservoirs in which the population accumulated its surplus resources. These resources formed the funds out of which the country was enabled to meet a calamity such as the one he had alluded to. The bank employed these resources in assisting and encouraging legitimate trade, and enabling it to be carried on with ease and perfect safety. In this manner, then, they recollected that when this bank was first established Ireland was almost without banking accommodation. The benefits it had afforded had been very large, and he might fairly attribute to them the credit of having contributed mainly to the improvement in the commerce of the country and the development of its trade and its agriculture. They could not speak of the stability of Ireland without speaking of the stability of the bank; and whilst he congratulated the country for the manner in which it had borne its sufferings and passed through its difficulties, he must add that this bank showed a state of things not less gratifying to the proprietors than beneficial to the country. The directors were able, notwithstanding the unfavourable circumstances to which he had adverted, to recommend the same dividend as heretofore—a result that could not fail to be satisfactory. The prospects of the country were now improved, and he certainly did trust that, when he met the proprietors on future occasions, they would not have to speak of bad harvests, the difficulties they occasioned, and the way the country met them, but would rather have to congratulate the proprietors on the steady and satisfactory development of the resources of the country and the increased prosperity of the bank. (Hear, hear.)

The report was then adopted.

Admiral Sir BURTON MACNAMARA said he could fully confirm all the Chairman had said as to the disastrous results of the failures of the harvests in Ireland, and indeed it was scarcely possible for anyone not residing in that country to form a correct idea of their magnitude. It was with very great pleasure that he, as a resident in Ireland, rose to bear testimony to the high character and the zeal of the officers of the bank in Ireland, and the gratifying estimation in which they were held; and in doing this he wished to direct the attention of the directors to the increased cost of living in Ireland lately, which he believed had made it difficult for them to "make ends meet." He did not desire to interfere with the duties of the directors in remunerating their officers, but had felt bound to say thus much, knowing the merit of the gentlemen of whom he spoke.

The CHAIRMAN assured the hon. proprietor that it was most satisfactory to the directors to receive such testimony of the high esteem in which their officers were held in Ireland, and the board would endeavour to make their condition as comfortable and suitable as possible. The directors wished to add their opinion of the high character of their officers in Ireland; but it would be manifestly unjust if in doing so they did not say that the same remarks were applicable to their officers in London, than whom it was impossible to find a body of gentlemen more devoted to their duties, or performing them with greater care, attention, and zeal. (Hear, hear.)

Admiral MACNAMARA then moved a vote of thanks to the directors and the officers of the bank.

The motion, having been seconded by a proprietor and put to the meeting, was unanimously agreed to.

The CHAIRMAN thanked the proprietors for this mark of confidence, and assured them that the same attention which had hitherto been bestowed on the management of their affairs would continue to be exercised, and he hoped with continued beneficial result to the bank.

We have received from Messrs. PASTORELLI and Co. particulars of a new arrangement they have made in the construction of METFORD'S THEODOLITE, and having inspected this instrument, we consider it possesses great superiority over those in ordinary use, especially as regards steadiness, which is gained by the adoption of three screws for levelling, in place of the ordinary parallel plate screws, which soon become defective and loose by wear, and render it impossible to read off the angles with the necessary degree of exactness. It has also a traversing plate, with a motion of 1 inch from its centre in any direction, the object of which is to enable the observer to shift his instrument over the exact centre, after having set it up firmly, nearly level, and approximately over the point required. By its use there is a great saving of time when the instrument has to be frequently set up in the course of the day. The telescope attached to the vertical circle admits of a transit motion. On the horizontal limb of the instrument is fixed a circular bubble, by means of which the instrument can be set nearly level in both planes by shifting either of the legs, this can be done with great accuracy, so much so that the three adjusting screws require but slight alteration to perfect the adjustment. We also notice that by an adaptation of Messrs. Pastorelli and Co., the edge of the horizontal limb is made angular, which is a decided advantage, as angles can now be read with greater facility. The advantages of a perfect instrument are so obvious, that we have no doubt both mining and land surveyors will thoroughly appreciate those offered in Metford's theodolite, as manufactured by Messrs. Pastorelli.

MINERAL PRODUCTIONS OF VICTORIA (AUSTRALIA).

Notwithstanding the general ignorance which prevails with regard to the position held by Victoria in the group of distinct colonies comprised by the continent of Australasia, its great mineral wealth has exercised a most important and beneficial influence on the monetary affairs of Europe during the last few years.

Those who visited the Exhibition of 1862 will doubtless remember the "gold trophy," which stood under the eastern dome. This pyramid represented the mass of gold exported by the colony of Victoria in ten years ending Oct. 1, 1861, the quantity being 26,161,432 ozs. troy, or 800 tons 17 cwts. 3 qrs. 7 lbs., and its value 104,649,728*l.* sterling. This pyramid is now erected at the Crystal Palace, a base being added to show the further quantity produced in the year ending Oct. 1, 1862, this being 1,817,408 ozs., or 55 tons 12 cwts. 2 qrs. 22¼ lbs., of the value of 7,269,632*l.* sterling.

The yield of gold from the mines of Victoria is very commonly attributed to Australia generally, but this is great mistake. The figures above quoted refer to the colony of Victoria alone, and do not include the gold fields of New South Wales and New Zealand, from whence also large quantities of the precious metal are constantly being added to the wealth of the world. The largest nuggets, or lumps of gold, ever discovered in the world have been found in Victoria; one of these nuggets, called the "Welcome," found at Ballarat, sold for 10,500*l.*; another, the "Blanche Barkly," sold for 6905*l.*; another, the "Sarah Sands," sold for 5532*l.*; two others sold at Dunolly for 5500*l.*; another, called the "Lady Hotham," valued at 3020*l.* Two nuggets found at Ballarat sold for 7500*l.* The "Heron" nugget, value 4080*l.*, was found by two young men who had only been three months in the colony. In August, 1860, a nugget of the value of 3336*l.* was found at Ballarat at a depth of 400 feet from the surface. About the same time one was found at Kingower, worth 3220*l.*, within a foot of the surface. Similar lumps of gold have been discovered from time to time within a few feet of the surface, while in the great reefs and deep sinkings, some of which have now reached a depth of between 500 and 600 ft., rich deposits of the precious metal are constantly being met with.

Since the discovery of gold in Victoria hundreds of nuggets have been found, and they are still frequently met with: by every monthly mail received from the colony instances of such discoveries are recorded. The last nugget of importance was found at Dunolly on Jan. 14, 1863, its weight being 20 lbs. 7 ozs., and its value 985*l.* It was found at a depth of 14 ft., in a deserted claim, by a man who had only been about five minutes on the ground. That the gold fields of Victoria are likely to afford profitable employment for ages to come to a great body of miners may be reasonably inferred from the able reports of Mr. Selwyn, the Government geologist, according to whose opinion the extent of ground in Victoria which is more or less auriferous is upwards of 20,000 square miles, or about one-quarter of the entire area. This does not include Gipps Land on the eastern coast of Victoria, as the geology of that district has not been investigated, but there also extensive gold deposits have recently been discovered. The extent of ground which is supposed to have been exhausted in mining during the past 11 years, and from which gold to the value of 112,000,000*l.* sterling has been produced, does not exceed 160 square miles. Within the last few years great improvements have taken place in the several branches of gold mining, especially in the extraction of gold from quartz. This work is now conducted on a large scale, and with machinery and scientific appliances of a very superior kind, so that quartz which was formerly considered too poor for crushing, and which in some cases did not contain more than 4 or 5 dwts. of gold to the ton, can even with that small percentage be now worked at a profit. The value of the mining plant employed in Victoria has been estimated by Mr. Brough Smyth, the Secretary for Mines, at 1,299,303*l.*

Victoria is not only rich in gold; silver has recently been discovered, and one or two mines are now being successfully worked. Tin ore and antimony are abundant, and large shipments of these valuable minerals are made to Europe. A block of antimony, weighing ½ ton, was exhibited in the Victoria Court of the International Exhibition.

Iron ore abounds in many parts of Victoria, and in the neighbourhood of Sandhurst thousands of tons are exposed on the surface of the earth.

The existence of coal was known in Victoria many years ago, but not till very lately has any attempt been made to develope the coal fields of the colony. A company is now profitably employed in working a coal mine at Cape Patterson, and already a large quantity of excellent coal has been forwarded to Melbourne. The development of the coal fields of Victoria will prove a powerful impetus to many new branches of manufacturing industry.

Kaolin, another mineral product of great utility, exists in inexhaustible quantities in many parts of Victoria; and in one district, Bulen, not far from Melbourne, a company is now profitably employed in manufacturing kaolin into a variety of useful articles. Immense beds of pipe-clay, from which the finest pottery can be made, are spread over many parts of the colony.

Many diamonds have been accidentally found in the Buckworth district. Mr. Martin, an extensive diamond merchant of London, who has examined some of the diamonds from Victoria, is of opinion, from the nature of the locality in which they have been met with, that a lucrative trade in diamonds would be opened, if proper means were adopted to prospect the creeks in which these precious stones have been discovered.

MINING IN AUSTRALASIA—MONTHLY SUMMARY.

ADELAIDE, MARCH 26.—There is no alteration to note in the price of Copper, which still remains at 91*l.* per ton. We understand the Burra and Wallaroo Companies have disposed of all they have made at this figure. The arrivals of Coal have not been very numerous; but the market is well supplied. There is a decline to note in prices, sales having been forced. Galvanized Iron is rather scarce, and market rates are fully maintained. There is no change in any other article, except No. 4 fencing wire, of which the market is very bare, but large parcels are afloat.

The English and Australian Copper Company in one year made the immense quantity of 3087 tons of fine copper from Burra Burra ores, at their works near the mine, the value of the copper being 290,000*l.*, of which a quantity equal to 135 tons was made in one week. The large expenditure of the company in the colony may be inferred from the fact that during the past year the outlay for feed and fodder for their horses and mules only exceeded 7000*l.* At the Wallaroo Smelting Works 150 hands are employed, besides wood carters, and the rate at which fine copper is made is 36 to 40 tons per week; but much more could be accomplished if the works were in full operation.

The Peak Downs Copper Mines, about 180 miles from Rockhampton, are being worked by a company of Sydney capitalists. It is said that the mines are very rich in the precious metal.

NEW ZEALAND.—The yield of gold in Otago is fast approaching to that of Victoria, and probably in the course of a year or two the younger gold country will be the larger producer. Judged by the comparison of the number of persons relatively employed, the Otago fields are many times more productive than those of Victoria. The gold is much more easily obtained, and without the enormous outlay for machinery which has characterised the Victorian gold workings during the last few years. The Lake gold fields are probably the richest ever discovered. During the thirteen weeks they have been opened the yield has been over 107,000 ounces, exclusive of amounts brought down by private hands, to a population averaging not more than 7000 miners.

AUSTRALIAN MINES.

KAPUNDA.—All the operations were proceeding satisfactorily. The quantity of ore raised in Jan. did not realise the estimate, on weight and assay, amounting only to 15½ per cent. average produce, equal to 58 tons. The quantity raised in February is estimated at 205 tons. Since the date of the last advices 82 tons of copper had been shipped per *Oscar* to London.

YUDANAMUTANA.—The reports from the mines continue satisfactory I enclose a letter in reference to the Martichudana Mine; it is upon this section that gold has been found. I send a sample, *vía* Southampton; other specimens have also been found. There is not a vessel at present on the berth for London; two are expected to lay on soon, and I hope by next mail to report having shipped 200 tons of copper ore. Capt. Anthony reports, under date of March 12:—Yudanamutana Mine: We are driving north in the 10, and raising good stones of ore, but not in large quantities. There is a good lode in the bottom of No. 1 winze. The Big Bunch on the top of the hill is still yielding similar quantities of ore. In the stope south of Mary's shaft there is an excellent lode. There are 10 tons of first-class ore on this section bagged, besides a large mass ready to be dressed. This ore, I believe, will average a produce of not less than 35 to 40 per cent.—Wheal Gleeson Mine: Here Henry's shaft is sunk 10 fathoms, and has passed through some good ore ground, and a good lode in the bottom. The stope south of this shaft is producing a fair quantity of first-class grey ore.—Martichudana Mine: We have sunk a shaft about 4 fms. on as fine a lode as you could wish to see so near the surface. I have no doubt it will turn out 5 tons per fm., of 20 per cent. ore. We have made a very important discovery in section 1397—an east and west lode. We have sunk about 9 feet on it, and the lode, which was small at the surface, is becoming wider and richer as it goes down.—Wheal Blinman Mine: We have been driving south from Jane's shaft, by six men, and have passed through some good ore ground, but not quite equal to the rich lode reported last month.—Martin's Shaft: Here the lode maintains its course and character, and is a very promising lode. All the ores from this shaft will pay for dressing.—Humby's Shaft: Here the lode has been changeable—sometimes pretty good, and at other times hard and irregular. I have no doubt we shall have a good lode here soon. On the whole, this mine is opening most satisfactorily.'

WORTHING.—The men in the shaft have been engaged in the past month timbering, but will commence to-morrow to drive the 53, and to open good ore ground. The 43 end south has much improved; the shoot of ore has been met with. The lode has not yet been cut through; but, so far as seen, it is a powerful, good lode of ore, of the usual rich quality as in the level above. A tram road has been laid down in the level during the month. A winze has been commenced in the bottom of the 33. Here the lode is a splendid course of ore. The western side of the lode, in which the winze is going down, is 4 ft. wide, almost solid ore. The lode in this place is from 18 to 20 ft. wide, carrying leaders from 1 to 4 ft. wide. There can be little doubt, judging from the lode in the shaft, of there being a real good lode of ore from the 33 to the 53, which, when properly opened, will enable us to enlarge our returns considerably. A winze has also been commenced in the 23; the lode is 5 ft. wide, yielding from 3 to 4 tons of ore per fm. So soon as this is communicated with the 33 we shall be enabled to take away the large block of ore ground standing between Legg's and Hocking's shafts. The stopes are all looking as well as at last report. During the month 150 tons of ore have been raised. The smelting is going on regularly. There are 13 tons of copper and a large stock of regulus on hand. The wood was coming in well. The number of men employed is about the same as during the past two months.

NORTH RHINE COPPER.—Capt. Barkla reports: The lode in the 60, now driving south of No. 1 winze, is about 2 ft. wide, but poor. The stratum of ground about the lode still holds good, and there is every indication of the lode making a large quantity of copper by extending the level further south of the present end; the lode contains quartz, mundic, with a small portion of black ore of low percentage. The lode in No. 2 winze is about 3 ft. wide, but poor at present; it contains mundic, quartz, and a portion of black ore, but of a too low percentage to pay for the dressing of it as yet. This winze is sinking with seven men.

GREAT NORTHERN COPPER.—Capt. Morrison reports: We have cut the lode at the 20; its appearance is anything but favourable, being very much broken up, carrying no ore, and intermixed with many branches of the country, which gives us but a poor prospect of success in that level; and another thing very much against us is a continuation of barytes in the lode. The stope in the back of the 15 east carries a splendid course of ore; the profit of it, however, being entirely lost, owing to the large quantity of barytes being intermixed with it. The main cross-cut through the hill is still in course of driving, though as yet without any result; and if anything is cut it will probably be this month, being in nearly 40 fms., and approaching an iron back, which has been the outcroppings of our lode throughout. The indications throughout the mine being so much against us, every possibly reduction in the way of expenditure has been made. Of the other sections, I can only speak favourably of the Oratunga, which at present is stopped on account of water; but having the donkey-engine and all necessary plant and conveniences, I would strongly advise giving it a fair trial, as the nature of the country for sinking and driving is totally different from that of this mine, and the prospects as fully favourable as those met with here.

SCOTTISH AUSTRALIAN.—At the Lambton Colliery all operations above and below ground were being proceeded with as rapidly as practicable, but they had been somewhat impeded during the month by the prevalence of heavy rains. The seam of coal being worked continued to present the same favourable features as hitherto, both as regards its thickness and quality. At Cadlangulong Mine the cutting through of the lode at the 23 fathom level has been continued and completed. The lode at this level has proved to be of the same character throughout, and not productive of copper ore in paying quantity. Heavy rains during the month had impeded mining operations; but apart from the hindrance caused by surface water, Captain Holman was experiencing some difficulty in contending with the water in the mine, and was in doubt whether it would be found practicable to sink much deeper without having to erect the large engine (which was placed on the mine with the intention of its being erected if required); and then, again, he was inclined to think that the prospects of the mine were not such as would warrant his recommending the outlay which this would involve. It was intended to raise all available ore from the stopes, and the subject of further exploration in depth was occupying the anxious consideration of Mr. Morehead, the superintendent.—Mr. Christoe reports: We have refined and dispatched to Sydney 2[illegible] 5 cwts. 3 qrs. 24 lbs. of copper, and have 10 tons more waiting for drays, and [illegible] 10¼ tons of coarse copper to refine; of metal (say) 9 tons of 50 per cent., and a large quantity of copper slags. The quantity of wood consumed is 993 tons, and the estimated quantity in bush 1850 tons.

ENGLISH AND AUSTRALIAN COPPER.—The quantity of coal at Kooringa was 570 tons, and of wood 3800 tons; at Kapunda there were 1816 tons of coal, and at the Port Works 1342 tons of coal and 40 tons of wood. There were three furnaces and one refinery at work at Kooringa, and three furnaces and one refinery at the Port Works. Since the date of the last advices further shipments of 73 tons of copper have been made to India and England.

FORTUNE COPPER.—Mr. Lionel Samson states: We have shipped 151 tons of copper ore per *Palestine*, and now enclose two sets of bills of lading for the same, as 142 tons of this parcel is ore landed ex *African*, which should be kept distinct from the remainder. Capt. Lorey reports: We are cleaning and timbering the 30, north-east of Walter's, where the lode is 10 ft. wide. We have about 5 fms. to intersect the east lode, and may then expect a good lode of copper ore, from the appearance of the level above. Ten men are stoping on back of the 20 on a lode 2 ft. wide, worth 4 tons per fm. Since last report we have dressed 35 tons of copper ore and 70 tons of lead ore, and have forwarded 28 tons of copper ore to Champion Bay.

DUN MOUNTAIN.—The despatches of Dec. 27 had only arrived two days previous to the mail leaving, and they were awaiting the result of the meeting of shareholders. Only the timber business and town traffic are being carried on in the meantime.

PORT PHILLIP AND COLONIAL GOLD.—The quantity of quartz crushed during February was 3038 tons, yielding 1641 ozs. 6 dwts. 12 grs., or an average of 10 dwts. 19 grs. per ton. The receipts amounted to 2750*l.* 0s. 7d.; profit, 1008*l.* 18s. The quantity crushed per week is 69 tons in excess of last month's return, and the yield shows an improvement of 1 dwt. 4 grs. per ton. The expenditure includes 250*l.* on account of stock of firewood, 130*l.* timber for new stamps, and 150*l.* Melbourne management. Deducting these, the expenditure is 8s. per ton. The machinery is all in good working order, and there have been but few interruptions for repairs during the month. The pumps are working well, and so is the stone-breaker. The opening out of the mine is being proceeded with; the accidental damage done to the pumping machinery has been repaired. The improvement in the yield of the quartz observable at the latter end of last month has continued, and there is an ample supply for our present crushing power. [A remittance of 1000*l.* has been received by this mail.]

A work, published in Adelaide in March of this year, from the pen of Mr. J. B. Austin, entitled "The Mines of South Australia," with an account of the smelting-works in the colony, and a brief description of the country, has this day reached us, *via* Southampton. It is an interesting, and indeed important, document, from which we will give extracts in our next Journal, with respect to the several mines in which the English public are specially interested; but we have now only space for the following remarks on the Yudanamutana, which is the last company established with English capital:—

We met, during the afternoon, about 20 drays loaded with ore from these mines, and carrying altogether about 50 tons. This sight tended very much to enliven the road, and the magnificent quality of the ore showed us that we were approaching a mine of no ordinary character. On one dray we saw a splendid block of ore, estimated to weigh at least 4 tons, and containing throughout about 40 per cent. of copper. The prevailing ore was grey oxide, accompanied by some green carbonate and a few beautiful crystals of arseniate of copper. Another dray, in company with the former, contained two large blocks, which, together, must have weighed above 3 tons. These, we were informed, were originally part of the same block as the first mentioned. The last 40 miles of the road was, with a trifling exception, excellent, and it would be no difficult matter to drive tandem at a good pace nearly all the way. The exceptional part of the road (Compass Pass), however, can be avoided by taking a new cut, leading more to the eastward, near Illinawurtina, Mr. John Scott's station, and this track is considerably shorter. I was amused, when riding alone past Oomberatina, a station of Mr. Elder's, 15 miles from Yudanamutana, by some natives, who called out to know if I was "going to look for copper?" The blacks now quite understand the object of many of the whites who visit the North, and several of them have pointed out copper ore. A black fellow was the first to discover the Yudanamutana Mine, which he called "Big One Old Man Copper"—"old man" being an expression in use among the blacks to denote anything of full size or maturity, and when "big one" is prefixed, the superlative degree of comparison is understood. When nearing the Yudanamutana Mine we came to a fine gum creek, the windings of which we followed for some little distance, until passing through a gorge, we entered a romantic looking spot, surrounded by high-peaked hills, for the most part crowned with rocks, in some of which the stains of copper were visible from a considerable distance. The situation of the mine reminds the traveller of Swiss or Welsh mountain scenery, and several fine sketches might be taken of the neighbouring hills; indeed, a panoramic view of the locality would be very pretty. The creek is shaded by gum trees and shrubs, the latter being 7 or 8 feet in height; and the hill sides are covered with low scrub and small flowering shrubs, with here and there a clump of pines. The first grand discovery which was made here consisted of a large boil of ore in ironstone and gossan, on the top of a low hill in the midst of the surrounding amphitheatre of mountains, and I have frequently observed a similar formation in connection with mines in the North. The hill referred to in the present case is on section "135*a*," and is about 80 or 90 feet above the creek, which flows on two sides of its base.

The boil of ore at the top contained altogether about 70 tons above the surface, a portion of it, on one side, is still left standing as a sample or memento of its original appearance. When an inspection of the mines of the colony was made by order of the Government, although no report was published, it was generally understood that such report would be rather damaging to most of the Northern Mines, and it was stated that the Yudanamutana Mine especially was condemned, the boil or bunch of ore on the surface being said to be all that ever would be found there, as it went down suddenly in the shape of a wedge, and ran out, and that no more than 60 tons could be raised from the hill. This assertion—which, whether it formed a part of the report handed in to the Government or not, was much talked of out of doors—has been most triumphantly refuted by the subsequent development of the mine. It was to a certain extent true that the great mass of ore, which was 10 or 12 feet wide, did go down in the shape of a wedge for a few feet, but the *end* of the wedge has not yet been reached, though shafts have been sunk on the lode to a total depth from the top of 28 fathoms. The aptness of the comparison ceased after the first 2 fathoms, for a finer and more regular lode below I never saw. The ore in the lode varies from 2 to 4 ft. in width, the walls are of killas, and the lode of fine gossan and steatite, with splendid grey ore, accompanied by green carbonate and liver-coloured ore. The lodes underlies about 1 ft. in the fathom, and has been traced altogether for above two miles in length, occasionally cropping out on the surface. On the property of the Yudanamutana Mining Company the lode runs for a mile, and has been proved at intervals for a length of above 1300 yards. The principal workings are in the neighbourhood of the boil of ore on the hill, where a shaft (No. [illegible]) was sunk at the side of the lode for 11 fms., proving the lode to that depth, the country as well as the lode in the bottom looking very favourable. Several fathoms to the north of this shaft were stoped away from the surface, so that the nature of the lode could be plainly seen. Some stoping has also been done on the south side of the hill with similar result; and a very promising caunter lode to the east of the main lode was open for a length of between 20 or 30 feet, and a few feet in depth. At the bottom of the hill on the south an adit level (No. 1) was being driven on the course of the lode; from the mouth of this level the large blocks of ore before referred to were taken: a winze was sunk 3 fathoms at the entrance to the level, and the appearances presented in it were highly satisfactory, the finest possible country with beautiful ore in the bottom. A little further south, and across a small flat, 70 fathoms from No. 2 shaft, we find No. 1 shaft sunk 12 fathoms on the same lode, and in every respect looking as well as the other, several fine stones of grey ore of about ½ ton weight, and from 40 to 50 per cent. produce, were raised from the bottom in my presence.

On section "135*a*," to the south of that which I have described, workings were commenced about 600 yards from No. 2 shaft, and several tons of red oxide and steel-grey ores raised. At this spot there is a curious volcanic-looking boil of ironstone, and what appears very much like lava and scoriæ. This boil was hollow internally, so that while one of the miners was working here with a pick, a mass suddenly fell inwards into the cavity, nearly causing him to fall with it. A short distance to the eastward a branch lode has been cut, apparently converging with the other at an acute angle towards a point in the gully to the north, and about this point a cross-course from the west seems to be intersecting the main lode. If this should prove to be the case, a large deposit of ore may be looked for at the point of junction. I have now described the extent of the workings at the time of my visit, but I also inspected the adjoining mineral sections belonging to the company, and on all of which copper is found. Two of these (Nos. 285 and 1398) appear to be better than the other, and I am glad to learn that operations have been commenced on 285, called the Martichudina, and very encouraging results met with. On one part of this section there are large masses of rock containing copper ore in abundance; and in another place stones of the size of road metal are scattered thickly up the slope of the hill for a width of 18 or 20 feet, and nearly half of them contain copper ore, many of them to the value of 40 per cent. A similar surface deposit occurs on section 1398, though, perhaps, not quite so rich as on 285.

WHEAL BLINMAN.—A mine belonging to the Yudanamutana Mining Company. There is a large reef of indurated clay-slate, intermixed with ironstone and gossan, and forming the back of a lode running nearly north and south, and distinctly traceable for about 200 yards on the surface. In the clay-slate small pieces of green carbonate and grey ore are found. The lode runs to the top of a hill, about 90 feet in height from the creek, and here it forms a large "boil," in which the ore was discovered. On the rocks being broken away a fine lode of exceedingly rich ore was seen 8 ft. wide, and underlying westwards into the hill about 18 in. in the fathom. When I visited the mine the top of the hill was being stoped away, and a splendid course of ore was exposed to view. It was nearly solid metal for a width of 8 ft., and had a peculiarly brilliant appearance, like a mixture of grey and red oxides. Some rich green and blue carbonates were occasionally met with, and specks of the finest yellow ore, known as "semi-metal." At the time of my visit No. 1 shaft was sunk 9 fms. on the course of the lode from the top of the hill, and carried ore the whole way down. No. 2 shaft is about 8 fms. south of No. 1, being further into the range, the first shaft commencing very near the face of the hill; the same lode has been cut in this shaft, where it is from 8 to 10 ft. wide, and the shaft sunk about 5 fms. on the lode; the ore raised is of similar quality to that in

the other shaft, and the quantity raised is about 100 tons of first and second quality, and 150 tons to be smelted. About 18 fms. farther south No. 3 workings are going on, and which, at about 2 fms. below the surface, have produced 5 tons of the finest ore, and about 10 tons for smelting. About 10 fms. still farther south, on the same lode, a shaft has been sunk 4 fms., from which about 5 tons of second quality ore have been raised, and a few tons have also to be reduced to regulus. About 20 fms. north of No. 1 shaft another shaft (No. 5) has been sunk 4 fms. through a good gossan lode containing ore of first and second quality. Fifty tons of ore of all qualities have been raised from this shaft, and 20 fms. farther north No. 4 shaft is sunk to a depth of 10 fms. through a good ore-bearing lode from 3 to 4 ft. wide. At the depth of 8 fms. the lode inclines farther west, and a drive is being carried to intersect it, and when it is cut again drives will be carried both north and south, on the course of the lode, under the various working above-mentioned. Up to the close of 1862 above 600 tons of ore of all qualities were raised here, 400 of which were estimated to yield an average produce of 40 per cent. A fine block of this value, and weighing about 2¼ tons had been sent to Port Augusta for shipment. The country was very dry, a well having been sunk 20 fms. in the bed of the creek without cutting water. There are, nevertheless, some fine springs in the immediate neighbourhood. A number of substantial pine huts for the miners have been erected on the mine, besides a good store of galvinised iron with a cellar beneath, also offices and captains' apartments.

YUDANAMUTANA AND WHEAL BLINMAN MINES.—"Up to the close of 1862 above 600 tons of ore of all qualities were raised here, 400 of which were estimated to yield an average produce of 40 per cent. A fine block of this value, and weighing about 2¼ tons, had been sent to Port Augusta for shipment. The total quantity of ore raised at the Blinman and Yudanamutana together is estimated at 2400 tons, and this has been accomplished by less than 80 men and boys in little more than seven months, in addition to a great deal of preliminary work, such as building huts, sinking wells, &c. Six hundred and thirty-eight tons of ore, averaging at least 40 per cent. produce, had been carted from both mines up to Jan. 22, and 514 tons shipped at Port Augusta: 200 tons are at grass at the Yudanatumana Mine, of which 300 tons are estimated to produce 50 per cent. of copper, and the remainder above 25 per cent. Nearly the same quantity is at the Wheal Blinman, and is thus classed,—above 60 tons about 50 per cent.; 500 tons 25 per cent.; and 300 tons 15 per cent."—*South Australian Advertiser.*

The *Spa Snake* has arrived in London with 200 tons of copper ore for the Yudanamutana Copper Company. The ore is reported to average at least 40 per cent. produce.

FOREIGN MINES.

ALTEN AND QUÆNANGEN.—Chas. Trelease, April 30: Quænangen—Lode E: In the 20 west the lode is still small and irregular, and if a favourable change be not met with soon we propose taking part of the men to open on the ore in the bottom of the level driven through some two months since. Good stones of purple ore are frequently met with in the 10 west, but the lode here is also unsettled. In the deep adit east the lode is about 1 foot wide, yielding saving work. The Baddern lode still holds out very promising indications, being from 4 to 5 feet wide, with a well-defined foot-wall, and worth about 4 tons of ore per fm. Some of the pitches have improved a trifle, whilst other parts look much as before.—Old Mine: In the stope above the 5 north the lode is 10 feet wide, which looks somewhat better, there being a good leader of orey work against the footwall about 2 feet wide. In the bottom of this level the lode continues equally large, but is still rather poor for ore. In the footstope joining the rise the lode continues to yield 4 tons of ore per fm., with very promising appearances. The stope above the 5, and south of the rise, is not so rich for ore as before, but the lode is large, and is composed of a good-looking matrix, with some saving work irregularly intermixed. The lode varies from 4 to 6 feet wide in the roof of the 10, yielding about 3 tons of of ore per fm. The level (10) south still looks very promising; here the lode is worth fully 3 tons of ore per fathom. We have recently fixed air-pipes in this level in order to force it forward as fast as possibe, as we consider it a very important point, and should this discovery hold good it will be desirable to resume driving the midway level southerly, which offers good chances. The ground in Carr's adit is again rather stiffer, but there are some good facings, which materially facilitate our operations.—Raipa: The quartzose lode in the 30, westerly, looks more kindly than before, there being now a small leader of ore on the hanging side. In the winze south-west working the vein of ore is about 7 inches wide, of good quality. The footstope below the shallow adit, north-west, still looks tolerably well, which yields from 2 to 2½ tons of ore per fm. We are making trials at two or three other points, but there is not any change calling for remark. At the United Mines there is but little alteration to note in the tribute workings where our proceedings are rather irregular, owing to the influx of water. The level at Ward's rather fell off in value last week, the lode being disordered by the cross-course, but it is again yielding good work, with indications of further improving.

ST. JOHN DEL REY.—The directors have received by telegram the following:—Produce for March, 41,018 oits.; cost for ditto, 10,445*l.*; profit for ditto, 5361*l.*; produce for ten days of April, 9948 oits.; yield per ton, 5·332 oits. No working in the sump this division.

DON PEDRO NORTH DEL REY.—T. Treloar reports that the month of March has been particularly wet; indeed, sometimes we have been quite deluged with rain, and the roads in many places are almost impassable. To get work done, therefore, under such circumstances, has been difficult, still we have progressed. The produce for the month of March amounted to 1834 oits., being an increase of 777 oits., as compared with the quantity raised in February.

EAST KONGSBERG.—D. T. Macdonald: South Sundsee continues to give a little silver in the bottom stope, east of shaft; the vein averages 4 inches in width, and of a kindly appearance. South Ramsrud continues to give silver in the upper and lower sink. During the past week very little has been blasted in the lower sink. On account of the narrowness of the level in which we began to sink upon the vein, we were obliged to shoot into the sides for the length of the sink (1½ fathom) to get sufficient room to move in. We hope next week to be able to blast upon the vein. North Gluck: We hope to have this mine cleared out in a fortnight from this date. During the week we have been engaged concentrating the poor slimes to send to the smelting-house.

BEARIZ TIN STREAMING.—Capt. Bray, May 8: San Miguel Deep Adit: The end is now about 6 fms. beyond No. 2 rise, and when driven some 5 fms. beyond the present point of progress a third rise will be carried up, thus giving us three shoots for loading from the large uncovered bed.—Railway Level: The distance driven last month was 6 ft. 6 in.; ground easier for driving; re-let at 120 rs. per yard. On the completion of the turn out (railway siding), and the shoot in the rise No. 1 from the deep adit, we shall open a rise in the railway level on the clay close to the quartz lode going up by the quartz to surface; we shall then commence stoping the clay above the railway level, and shall send it down through the shoots into the wagons in the deep adit, whence it will be conveyed direct to the stamps. The large uncovered bed above the deep adit will be kept in reserve for the winter, when water is plentiful, or for any period or circumstances when or under which it may be more expedient to resort to this large reserve stock, always at hand, and easy to remove.—San Francisco Deep Adit: I am gratified at announcing a marked improvement in the ground, which is now much easier for driving. We are still some distance from the great bed, but from present indications I am assured of cutting clay long before reaching that point. Capt. Bray adds that the stamps, which began to work on April 25, a requite fulfilling his expectations and calculations (as stated in the report of the directors recently issued) as regards the quantity of kaolin capable of being passed through them. As regards water, he repeats that, unless under extraordinary circumstances, the supply will be ample for all purposes. As respects labour, he observes we are again full handed. Everything is favourably progressing, and we are fully ready for the round buddles. A further small sale of tin had been made at the mines at 137*l.* 10s. per ton, and it was expected that the 5 or 6 tons on hand would be sold in a few days at the same price.

VALLANZASCA GOLD.—We have at the mines (May 14) about 60 men engaged in constructing various shoots and tramways for bringing the ore economically and speedily to the sledge road; this work is of vital importance, as the levels will thereby be put into a position to furnish the large quantities of gold ores which we intend to treat daily by the machinery. The rich ore lately discovered in the Cava Vecchia level, on the yellow lode, was tried last week by working two charges of it in the old amalgamating mills. The report of the reduction officer shows that one charge yielded very nearly 3 ozs. of gold to the ton of ore; and another yielded 1 oz. 14 dwts. of gold to the ton. When you take into consideration the great waste of gold which takes place by these mills, you can easily imagine how important the discovery is, and how rich the ore must be to yield the above quantity of gold, even by the present method. We have made a thorough survey of the mines, and can assure you that many thousand tons of ore are in sight, all proved to contain remunerative quantities of gold. After making some trials we have definitely decided upon the machinery which we shall employ.

WEST CANADA.—Capt. Plummer, April 14: Huron Copper Bay: The 20 fm. level, west of new engine-shaft, is still without ore; the men on the east of the shaft have not yet completed the plat, about which they have been engaged for some time. We have, however, a large lode, yielding 4 to 5 tons per fathom. The 10 fm. level, west of the same shaft, is poor; the lode contains a portion of ore, but not enough to be reckoned of any value. The 10 fm. level, west of Palmer's, on the north branch, is yielding 3 tons per fathom, and is very promising. The winze on the fire lode, below the 10, east of Palmer's, is yielding 3 to 4 tons per fathom.—Wellington: The lode in Grenfell's shaft is poor, but the progress in sinking is favourable. We are not sinking the shaft as a speculation, but for convenience; without it we cannot work away the fire lode, or the new lode in its vicinity. The lode in Crase's shaft is much as usual, and will yield 1¼ to 2 tons per fathom. The 10 fm. level, west of this shaft, is yielding 3 tons per fathom. In sinking Hooper's shaft we have made good progress, and the lode appeared to be improving as we descended, but a day or two since the men in boring a hole to deepen the shaft unlocosened a large stream of water, which in a very little while filled the shaft for several feet in depth. We had to use all our force to reduce it, which, having accomplished, we filled the hole with a wooden plug. We have about 10 fms. of high ground at this point, which we contemplate taking out before we attempt to sink. The lode in Rowe's shaft is still good, yielding from 4 to 5 tons per fathom, but it appears to be shortening as we descend. The lode in Knight's shaft (Fire lode) is divided by a horse of trap, but there is no perceptible difference in the value of the lode. The water is gradually increasing as we descend. The 10 fm. level on Fire lode, west of Grenfell's, is not so good, and is at present torn up into branches, and has expanded in width considerably. No doubt, as soon as it becomes more concentrated it will assume its former character. You will learn that we dressed a total quantity of copper ore for March amounting to 259 tons, and estimate a similar quantity for April, which will bring our clean ore in stock by the 1st of May up to 1233 tons.

NEW AMALGAMATOR.—A new gold and silver amalgamator, containing several new and important principles in its construction, may be seen at work every day, at the Miners' Foundry, Firat-street. This amalgamator has been patented by Mr. West, a practical Washoe silver ore worker. One of the prominent features of this pan, is the introduction of a copper steam-pipe around the inside circumference, which operates as a most admirable collector of the amalgam, nearly all of which is always found at every "clean up" adhering to this pipe. When the amalgam is once brought in contact with it no action of the machine can again separate it, but it remains permanently fixed, until the pan is cleaned up. Other improvements have also been introduced in the shape and movements of the mullers. We would advise quartz men to call and examine this pan for themselves. The results of the operation of this pan as compared with those now in general use are said to be greatly in its favour. It can be obtained at the Miners' Foundry.—*San Francisco Mining and Scientific Press.*

HOLLOWAY'S OINTMENT AND PILLS—RELIEF AND REMEDY.—It is useless here to enter into the question how this ointment works such astounding cures of all descriptions of sores, ulcers, bad legs, and scorbutic or scrofulous eruptions. Sufficient is it for all sufferers to know that the united testimony of thousands proves the healing powers of Holloway's ointment, and earnestly recommends its trial to all afflicted with these maladies. When this treatment is once commenced, the ease and comfort it bestows will induce its steady continuance, till the cure is completed. These excellent remedies can be purchased everywhere, either at home, in the colonies, and foreign countries, and the method of using them is plainly printed and wrapped round each package.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been in a very unsettled state during the whole week, and the amount of business transacted of a very limited character, and by no means satisfactory. One great cause may be attributed to the embarrassment occasioned by the defalcation of a member of the Mining Exchange on the last account, following so closely upon another on the previous settlement, which, in all probability would have proved more serious but for the prompt and prudential steps adopted by the executive of the Mining Exchange. These defalcations have, no doubt, resulted from the pernicious system, so frequently and justly condemned by many, of "bulling" and "bearing" shares for the "accounts," without any adequate knowledge of the character and position of the contracting parties, as well as the limited amount of capital employed among the members generally. Another cause may be attributed to the retrograding movement of the standard for copper ore, which is a most unfavourable feature towards any progressive improvement of the market. And, thirdly, the interruption arising from the Epsom Races, which has drawn many of the principal dealers from their usual scene of business. This combination of events has proved very detrimental to the operations of the week.

WHEAL SETONS have been rather largely dealt in at present quotations, and still sought for.——COPPER HILLS have been enquired for, but it does not appear that many transactions have resulted.——TINCROFT and ILLOGAN are in request, and freely dealt in, without any corresponding advance.——SOUTH FRANCES shares have been done at lower rates.——EAST BASSET and STRAY PARK have been done at advanced prices.——COOK'S KITCHEN, EAST CARN BREA, and GREAT SOUTH TOLGUS have shared in the transactions of the week.——WHEAL GRENVILLE, and EAST GRENVILLE shares have been done at lower rates.

NORTH ROSKEAR and ROSKEARNOWTH continue heavy, with little business, at minimum prices.——NORTH CROFTY and NORTH TRESKERBY have been more in request.——NORTH DOWNS are dull, at present rates.——WHEAL HARRIETTS have been more in demand, and quoted higher.——EAST ROSEWARNE and WHEAL KITTY (St. Agnes) have fluctuated, but likely again to improve.——GREAT WHEAL FORTUNE and WHEAL GRYLLS have been in fair request, at improved rates.——BASSET AND GRYLLS, and WENDRON CONSOLS, continue firm.——SITHNEY AND CARNMEAL are more in request, and slightly improved.——ST. JUST UNITED and ST. JUST CONSOLS have been, and continue, in fair demand; a great many shares have changed hands, at higher rates.——MARGERYS are offered at lower figures.——WHEAL MARGARET and PROVIDENCE are firmer.——EAST CARADONS have sustained a very severe decline, and there is evidently strong efforts being made to depress the shares; a slight falling off in the value of the ends, the accidental breaking of the fly-wheel, and the diminished sale on Thursday, arising from the depressed standard, have all been used to lessen the price of shares; but there is evidently a reaction at hand.

MARKE VALLEY and WEST CARADON are quoted lower.——LUDCOTTS have been more in request, but without any advance in price.——NEW WHEAL MARTHAS have been in in good demand; the improved value of the ore, and the general prospects of the mine, warranting the demand.——CREBORS continue in great request, arising from the improved position and prospects of the mine, with scarcity of shares for delivery—quotations have fluctuated, but are again firmer.——BOTTLE HILLS have been largely dealt in at minimum quotations.——GAWTON and HAWKMOOR have changed hands at nominal prices.

GUNNIS LAKE (Clitter's Adit) continues to look well in all the respective points of operation, and the engine-shaft, which is now down to the 20 under the adit, is in a large and productive lode. They recently opened at surface on another lode, about 120 fathoms further south, which is found to be rich for tin. This discovery is of the greatest importance, inasmuch as it is entirely whole for 700 fms. in length, and 80 fms. in height, and can be taken away at a very low cost, without any impediment from water, being completely dry. It, therefore, requires only time to bring this mine into a profitable and permanent position.

At EAST CARN BREA they have a fine course of ore in the back of the 50, yielding fully 5 tons per fathom. The 50 end east is worth 2 tons, and west about 1 ton per fathom. All the other places are looking much as usual, no change to notice.——NORTH CROFTY is reported to have improved in the 170 west, where the lode is worth 30*l.* per fm. Several of the eastern ends have improved, and looking well for further improvement.

EAST ROSEWARNE: The alteration in the pitwork at the shaft is completed, and the lode still looking well; now worth full 25*l.* per fm. The 65 east has been in disordered ground, but is now improving, with fine stones of ore in the end, and much better in the bottom. The 65 west is worth 8*l.*, and the 55 west 25*l.*, per fm. The lode in the sump-winze is worth 28*l.* to 30*l.* per fathom. All the stopes and other places are without any change.

SITHNEY CARNMEAL: The lode at Bounder shaft is large, being from 4 to 5 ft. wide, worth 14*l.* per fm. for tin. The shaft is down 12 fms. below the 50, and, from the character of the lode (which is the same as the Great Wheal Fortune rich lode), there is every reason to calculate on a very important discovery. The 50 east is in a most promising lode. This point is considered the great feature of the mine, but the flat-rod shaft is down several feet below the 75, whilst the several levels continue to hold out considerable promise for tin. At the meeting on the 14th there was a debit balance of 1091*l.*, and a call of 10s. per share was made.

The CORNUBIA TIN MINING COMPANY'S prospects are assuming a most prominent character; and, from the recent discoveries, there is every reason to calculate on progressive increase and profitable returns. The lodes are numerous, and of more than ordinary size, with tin largely disseminated throughout, whilst the matrix being of a light and easy nature renders the dressing and preparation of tin for the market inexpensive and expeditious. The greatly improved position of the mine, and the extensive run of tin ground already laid open, with the great addition which will be afforded when the 70 is developed calls for an increased amount of capital, to expedite the operations and to ensure an earlier profitable result. With this view the directors have prudently and advisedly decided on the issuing of 3000 more shares, which will enable them to increase their present inadequate stamping-power by the addition of 32 heads of stamps, and other necessary machinery, which, from the increased returns, seem absolutely necessary. The terms of this new issue of shares (of which the majority has been taken) affords an opportunity of secure and profitable investment. The 3000 shares are offered at 2*l.* per share; 10s. deposit entitles the holder to a preference dividend of 10 per cent. out of the first profits of the company, redeemable at 10 per cent. bonus upon the amount paid up at any time within three years, and secured by the mine and extensive machinery. With the present prospects and probable returns there is little doubt but the mine will be making profits within three months from the completion of the requisite machinery, which is expected to be ready early in June, when from 12 to 13 tons of tin will be sold monthly. The 50 and 60 have much improved, and No. 5 lode is now in the shaft about 7 fms. below the 60, and rich for tin; this lode proved good from 50 to 60 fms. in length in the 50. No. 6 lode has gone off north of the shaft, and will be intersected by a cross-cut from the 70, and which, when last seen, was highly productive. The property has been recently and specially inspected by Capts. Charles Thomas, of Dolcoath, J. Vivian, of North Roskear Mines, and Captain Daw, of Carn Brea, whose reports and opinions of the value, importance, and successful results are sufficient guarantees for the security of any amount invested. Extraordinary samples of the produce can be seen at my office, and any of the unappropriated shares may be secured on immediate application to JAMES LANE.

SALE OF MINE SHARES.—On Thursday, Mr. T. P. Thomas submitted for sale by public auction, at Garraway's, an unusually large quantity of mining stock. The sale was very numerously attended. The following prices were realised:—55 North Rhine, 1s. 3d.; 40 East Devon Consols, 9d.; 20 ditto, 2s. 9d.; 10 ditto, 2s.; 20 Unity, 10s.; 10 West Penstruthal, 9s.; 10 ditto, 11s.; 10 ditto, 16s.; 12 ditto, 17s. 6d.; 5 Buller and Basset, 1s.; 50 ditto, 1s. 9d.; 5 Bedford United, 2*l.* 11s.; 6 Devon and Cornwall, 3*l.* 5s.; 20 East Caradon, 31*l.* 6s. 3d.; 5 East Providence, 2*l.* 1s.; 5 South Condurrow, 4s.; 1 South Tolgus, 48*l.*; 10 Wheal Hearle, 27s.; 10 ditto, 29s.; 10 ditto, 28s.; 10 ditto, 29s.; 10 ditto, 34s.; 22 Calvadnack, 7*l.* 15s.; 75 New South Caradon, 8s.; 20 Rosewarne Consols, 26s. 6d.; 8 ditto, 28s.; 67 Great Retallack, 5s.; 3 Uny, 6*l.* 10s.; 5 Tincroft, 19*l.* 12s.; 10 ditto, 19*l.* 12s. 6d.; 10 Great Caradon, 2*l.*; 5 Spearne Consols, 7*l.* 10s.; 5 Margery, 3*l.* 15s.; 1 West Tolgus, 65*l.* 10s.; 2 Wheal Kitty (St. Agnes), 7*l.* 1s. 3d.; 20 Redmoor, 2s. 6d.; 5 Norris, 12s. 6d.; 10 Alfred Consols, 4s.; 25 Bottle Hill, 10s. 6d.; 25 ditto, 9s. 6d.; 45 ditto, 9s.; 10 Prosper United, 10s. 6d.; 10 ditto, 10s.; 10 ditto, 9s. 6d.; 10 ditto, 10s.; 19 ditto, 11s. 6d.; 20 South Caradon Hooper, 13s. 6d.; 20 ditto, 13s. 3d.; 10 ditto, 13s. 6d.; 25 Carnewas, 1*l.*; 125 ditto, 1*l.* 1s. 6d.; 20 Nant-y-Iago, 30s.; 20 ditto, 32s.; 60 ditto, 34s.; 5 East Falmouth, 2s.; 20 Crelake, 16s.; 40 ditto, 10s.; 20 ditto, 11s.; 20 East Carn Brea, 8*l.*; 28 ditto, 7*l.* 17s. 6d.; 1 Grambler, 11*l.*; 1 ditto, 10*l.* 10s.; 1 ditto, 10*l.* 5s.; 1 ditto, 10*l.* 5s.; 150 New Wheal Prospidnick, 5s.; 50 ditto, 5s. 3d.; 25 Ilogan, 31s.; 50 ditto, 30s.; 8 Long Rake, 16*l.*; 5 Union, 4*l.* 10s.; 5 ditto, 4*l.* 9s. 6d.; 50 Crebor, 3*l.* 10s.; 180 ditto, 3*l.* 9s.; 2 Cargoll, 39*l.*; 120 Tamar, 10s. 3d.; 25 North Minera, 5s.; 25 Trumpet United, 3s.; 400 ditto, 2s.; 20 Great Retallack, 4s. 6d.; 70 North Treiawny, 2s.; 10 Grenville, 5*l.* 8s.; 15 Redmoor, 2s. 3d.; 1 West Caradon, 27*l.* 10s.; 15 Marke Valley, 6*l.* 10s.

ANALYSIS OF CAST-IRON.—Few subjects present features of greater importance than the best means of obtaining accurate information regarding the constituents of any sample of cast-iron. From the ironmasters, who from the crude pig manufacture sheets, rails, bars, the panoply of an armour-plated frigate, perhaps, to the civil engineer, the success of whose works may depend on the ultimate strength of columns and girders of cast-iron—all are concerned; by all any further progress in the means of obtaining an accurate analysis of a material so largely used must be hailed as a welcome aid to their labours. Hence, if we regard the subjects in this point of view, everything, no matter how apparently trivial it may seem, which tends to throw light on an admittedly difficult subject must be regarded as of more or less importance. We would call the attention of our readers to a phenomenon which we have found sufficiently obvious, yet has not, we believe, received any share of attention from those who might possibly draw valuable deductions from it. When melted pig-iron is tapped into a ladle in moderate quantities, so that excessive heat may not prevent pretty close observation, it will sometimes be found to boil violently, sometimes its surface is calm from the first. Now, if this molten iron is allowed to stand a few minutes until it becomes perfectly quiet, and is then carefully skimmed clean, we shall find that a beautiful iridescence covers its entire surface, due to the constant breaking up of the extremely thin film of oxide formed on the iron. This iridescence, frequently called by the moulders the "pattern of the iron," may, on close inspection, be found to consist of a multitude of many-sided or raved stars, in constant motion, breaking up and vanishing, and forming anew with the velocity of thought, and almost eluding the eye. It is a matter of extreme difficulty to determine the number of rays in each figure; we believe we are correct in saying five. One thing is certain, that their shape and character is invariable with every species of iron with which we are acquainted. This much premised, we would call attention to what we are inclined to consider as a proved fact—that the size of the different figures which make up the "pattern" in all cases depends on the size of grain of the iron when in the pig. Thus hematite, which is a large-grained iron, will, when melted, present a large pattern. Fine-grained irons, such as the grey forge pig of some of the Staffordshire works, give an extremely small pattern. This distinction is, we understand, so well marked, that in some cases a glance at the melted iron will enable an accurate opinion to be formed as to the size of grain in the pig. We have already said that it is almost impossible to determine exactly the form of the figures presented by the iridescence. Might not instantaneous photographs be taken, which would give us all the information we require on the subject? We throw out the hint to those skilled in that department of science. We believe it might be possible to obtain photographs from the surface of vessels containing different samples of melted iron, whose comparison might lead to valuable results. As it is, it seems clear that the character of the figures bear some relation, more or less fixed and determinate, to the laws regulating the crystallisation of the iron on cooling; and in this belief, without wishing to be understood as making any positive assertion on the subject, we would suggest it to those occupied in scientific research, as one which, while certainly not devoid of interest, may in able hands lead to useful practical results.—*Mechanics' Magazine.*

MINE ACCIDENTS.—At Buller and Basset United Mines, Frederick Uren, 33, and George Teague, 19, were killed through the "blowing out" of a boiler. Verdict "Accidental Death."—At New Treleigh Mine, Wm. Ennor, 24, was killed by falling down a shaft a distance of 110 fms. Verdict, "Accidental Death."

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede, May 18: The lode in the stope in back of the 42, north of engine-shaft, has improved a little, producing at present from 15 to 20 cwts. of silver-lead ore per fm. I have nothing new to report on at surface; all is going on as usual. The last parcel of ore sold for 11*l.* 11s. 6d.; the third part of it was slime ore, which brought the price down so low.

ALFRED CONSOLS.—J. Thomas, T. Bawden, W. Teague, May 20: The 104, driving west of Painter's shaft, has improved since last week's report, producing now from 2¼ to 3 tons of ore per fathom. All the other operations are without change to notice.

ALLT-Y-CRIB.—J. Hughes, May 19: The deep adit level is much the same as it has been for the last 7 or 8 fms., with spots of lead in and out, but not regular, with some water still coming from the end, and we take it for a good indication, as we are coming nearer the junction. The tributers are as usual. We have got about 9 tons ready for the sampling of their ore.

BAGTOR.—W. Hosking, May 21: Prosper engine-shaft is being sunk with the greatest possible dispatch by six miners and three labourers; it is now down 10 fms. below the shallow adit; lode 2 ft. wide, and producing moderate work for the stamps. The lode in the S, east of Prosper shaft, is 1 foot wide—saving work. We have set six men to stope the back of this level, at 55s. per fathom, where the lode is 2 ft. wide, yielding work of a fair quality. Our new, or western shaft, on Prosper lode, is down 6 fms. from surface; but we have not yet reached the bottom of the ancient workings. We have already met with some arches, or pillars, which were left to support the ground, and find them carrying rich work for tin, and indicating increased quantities in depth. The ground here is of a very easy and inexpensive nature, which will enable us to make speedy extension through the lode on reaching whole ground, and where from the vast amount of surface work, and the fact of a very masterly cross-course passing through the lode, I confidently expect to find it rich.

BEDFORD UNITED.—J. Phillips, May 19: We are driving by the side of the lode in the 130 east and west. The stopes in the back of this level are worth 4¼ tons. The lode in the 115 west is 15 in. wide, producing stones of ore. The stopes in this level are worth 4 tons of ore. We have not taken down the lode in the 103 west. The stopes in this level are worth 4 tons. The lode in the 90 west is 2 ft. wide, producing stones of ore. The stopes in this level are worth from 2 to 3 tons per fm. We are progressing satisfactorily with our operations at the north shaft.

BOTTLE HILL.—J. Eddy, May 18: Main Lode: I have taken samples from the deep adit level 30 fms. in length on the course of the lode; the lode here is about 6 ft. wide, producing tin, but not sufficient to pay. The stopes on this lode are without alteration.—New South Lode: We have driven east from cross-cut from 3 to 4 fms. on the course of the lode. When the lode was first cut the ground was easy for driving; set for 30s. per fm., and this is a good price; the lode then 2 ft. wide, worth fully 12*l.* per fathom. The lode is now about 1 ft. wide, and the ground much harder. The lode is now producing rich stones of copper ore, but poor for tin. There is a very hard stone both north and south of the lode for the present, but I think this channel of ground will not continue far, as there is nothing hard seen a few fathoms east in the deeper levels. I believe a change of ground will soon take place, and then, no doubt, the lode will make larger, and again be productive for tin. The lode in the west end produces good stones of tin, and of the same character as the east end when we first cut the lode. The lode in this end is small for the present. We must get the east end further on before we can drive west with speed, not having sufficient air to keep both going at the same time. We have commenced burning for our next sampling; the quantity I am not prepared to say. The stuff now coming from the main lode is very poor.

BRONFLOYD.—J. Lester, May 21: The engine-shaft is now down 12 fathoms below the 40, at which depth we shall to-morrow commence cutting plat, &c. The shaftmen during the past week have been engaged putting in lift, fixing footway, &c. The lode in the 40, west of winze, is not yielding quite so well as formerly. The lode east of the winze is much the same, yielding from 10 to 15 cwts. per fathom. The stopes in the back of the 40 continue to yield about 25 cwts. per fathom. No alteration in the lode in the stope in the back of the 27. The 50 tons sold on Monday last will be down at the stores in Aberystwith ready for shipment to-morrow.

BRYNTAIL.—J. Roach, May 20: A plat has been cut for lodging stuff from the new engine-shaft, cistern-plat cut, bearers and cistern fixed, and lift placed therein, water taken up, &c. I have let the shaft to sink the required depth for a 20, at 12*l.* per fm. Every exertion is being made by the men to accomplish their task as quick as possible. Indeed, everything here is pushed hard to accomplish the object we have before us.

CALSTOCK CONSOLS.—W. B. Collom, May 21: North Copper Lode: We are driving east on this lode by six men; at the last taking down of it it was 1 foot wide, of ore and quartz—a very promising lode. In the rise in back of this level, near the cross-course, the lode, which has been split up into branches, is coming together again, and I anticipate in a few feet more driving we shall have a large lode here.—South Lode: The western pitch in back of the deep level is worth from 8*l.* to 10*l.* per fathom for ore. In the eastern rise from the same level the lode is increasing in size, and yielding about ½ ton of ore to the fathom, with an underlie towards the caunter lode of about 8 feet in a fathom. Over this rise there is a very large lode of gossan. In the western rise from the 40 we are up 8 fathoms; both lodes are together, but rather disordered.—Danescombe Lode: The ground here is improving for driving, the lode being 1½ ft. wide, of peach, with a little ore, mundic, and fluor-spar.

CAMBORNE CONSOLS.—W. Roberts, May 20: In the 50, driving west, the lode is 2 ft. wide, composed of blende, mundic, and occasional stones of ore. In the 50 cross-cut north a small branch has been intersected. In the 50 east some good ore has been broken, leaving good tribute ground in the back of the level; the lode is now about 6 in. wide, producing stones of ore.

CARADON CONSOLS.—W. Rich: The main lode in the 68 east carries good stones of ore, with plenty of mundic, and seems to be improving since the horse of granite is cut out. There is nothing new to report on in any other part of the mine.

CARADON UNITED.—R. Knapp, May 20: We have been compelled to suspend operations again at the trial shaft on account of the water. The lode at this shaft in the 10 is very large, 9 to 10 feet wide, and now appears to be the junction of two or three lodes, which from a difference in their underlie separate in depth and become distinct. We have intersected three lodes at the adit, east of the cross-course, and north of No. 1 north lode. The first is about 2 feet wide—a promising lode, composed principally of quartz, sugar-spar, and mundic, and good spots of rich yellow ore. The west is about 6 fathoms in advance of this end, and is 1½ ft. wide, containing a little yellow ore and native copper, and letting out water freely. The other lode is about 5 to 6 fathoms further north, and is 2½ to 3 feet wide, producing some very rich work for tin. This lode appears to be distinct from those in junction at the trial shaft, and, if so, is standing still to the north of them. We have commenced driving on Nos. 1 and 3 of these newly-discovered lodes at the adit. The middle, or No. 2 lode, will probably be intersected by No. 1 lode in driving east, about 10 to 12 fathoms. The caunter lode, going west at the adit, has a very encouraging appearance; is 3¼ feet wide, containing a good deal of native copper, mixed in the gossan, and producing good stones of yellow and grey copper ore. The masons have commenced building the smith's shop, and the excavation for the foundation of the engine-house will be completed in a few days, when that building will also be commenced.

CORNUBIA (TIN).—J. Symons, P. Pinch, May 21: In the past fortnight the flat-rod shaft has been sunk about 15 feet, making the same now 8 fms. 3 feet below the 60. At this point we have intersected No. 4 lode, which is from the north to the south wall fully 2 feet, carrying a very rich leader nearly 3 in. wide, producing some beautiful pieces of crystallised tin; this lode, as well as the No. 5 lode, appears to be improving as it goes down, being much better in the shaft than it can be seen at any point in the 60 fm. level, which evidently prove that as the lodes get deeper in the granite they will be more regular and better defined, and, consequently, richer for tin. We are pushing the sinking with all possible dispatch, having put on three additional hands, and if the ground continues favourable, we shall reach the 70, with the necessary depth below, on or before the time appointed. The stope in the 60, on No. 4 lode west, is of a very promising character, yielding good work. The 60 stope, east of shaft, on No. 5 lode, is producing some rich stones of tin. The lodes in the 50 and the 40, about Trestrail's shaft, continue very large, and are rather improved in quality. The 30 end, on No. 2 lode, and the end in the same level, on No. 4 lode, driving west, are opening up some very promising ground, which is important, for as soon as Knight's shaft is down to the 30 we shall be able to take away a quantity of stuff from this point. The stopes in the 20, west of Knight's shaft, are yielding stuff or more than average value,—in fact, the work now raising throughout the mine is considerably improved, and we have no doubt our next monthly sale of tin will exceed any previous quantity. The machinery on the mine continues to work well, and we are getting on with all the surface matters as fast as possible.

CROOKHAVEN.—Capt. Thomas, May 18: the engineer has made a very considerable improvement in the engine, so much so that the consumption of coals is now only 7 cwts. in 24 hours. The men are pressing on with all speed the 20 and 40 fm. level cross-cuts south from the engine-shaft; these ends are set at 5*l.* per fm. each end.

CUDDRA.—F. Puckey, E. Dunstan, May 21: Walker's shaft is now down about 8 fms. below the 90, and the ground is still favourable for sinking. We have not yet cut the north lode in the 90 cross-cut, north-west of Walker's shaft. In the 75 west there has not been any lode taken down since our last report. In the winze sinking below the 75 the lode is 4 ft. wide, and will produce 4 cwts. of tin to the 100 sacks. In the stope in the back of this level, west of winze, the lode is still 4 ft. wide, and worth 3 cwts. of tin to the 100 sacks. In the rise in back of the 60, west of Walker's shaft, the lode is 2 ft. 6 in. wide, worth 10*l.* per fm.

CWMBRANE.—May 21: In the 40 north the lode is disordered at present by a hard bar of stone, but will still produce good stones of lead ore. The 40 south will produce about 5 cwts. of lead ore per fm.; the lode is looking very kindly, and likely for further improvement. A tribute pitch in bottom of the 20 is looking much better, and will produce from 1½ to 2 tons of lead ore per fm. No alteration in any other part.

CWMHEISIAN (GOLD).—Capt. Williams, May 18: At the east mine we have a fine lode in our stope, 18 ft. wide, with a good mixture of silver-lead, blende, copper, and mundic—daily improving in richness. The pump has not yet arrived. At the water-fall level our progress in driving since my last is 6 ft.; the lode is smaller and poorer, being only 2 ft. in width, with branches of quartz and mundic. At the west mine I have no alteration to report. The stope continues much the same in richness. All the surface works are going on favourably. We shall soon complete the sheds and machines.

DALE.—R. Niness, May 21: We have finished cutting the plat referred to in my last 76 fms. below surface, and sunk the shaft 3 ft. below that point.

DEEP LEVEL.—May 21: The men have commenced to sink through the clay, to get to fast ground previous to boring; now down 3 fms., and no signs of rock as yet.

EAST BRONFLOYD.—C. Williams, May 20: The engine-shaft is down below the 15 fm. level 21 ft., the ground in which is compact clay-slate formation, good for progress; this bargain I hope to get completed to the 25 in about two months' time. The 15, going east, has been extended from the engine-shaft 23 feet; the lode for the whole distance is 30 ft. wide, consisting of spar, blende, carbonate of lead, and silver-lead ore, yielding of the latter 20 cwts. per cubic fathom. The lode in the stope in the back, over the same level, is of the same size and character, and yielding about the same amount of silver-lead ore per fm. We sampled the first parcel of 20 tons of silver ore yesterday.

EAST CARADON.—J. Seccombe, May 20: Caunter Lode: The 50 east is worth 12*l.* per fm.; the 60 east, 30*l.* to 35*l.*; the 70 east, 25*l.*; the 70 west, 40*l.* per fathom.—New Lode: The 70 east is worth 12*l.* per fathom. The 70 west produces stones of ore. On Saturday last the shaft of the fly-wheel broke, which will cause some days' delay to the drawing-engine.

EAST CARN BREA.—T. Glanville, J. Scholar, May 16: Tutwork Setting: The old engine-shaft to sink below the 60, by nine men, at 25*l.* per fathom. The 60 cross-cut to drive north of the old engine-shaft, by four men, at 7*l.* per fm. The 60 to drive east on Middle lode, by four men, at 6*l.* per fm. The 60 to drive west on Middle lode, by four men, at 6*l.* per fm. The 50 to drive east on south lode, by six men, at 8*l.* per fm. The 50 cross-cut to drive south, by four men, at 5*l.* per fathom. The winze to sink below the 50 fm. level, east of the cross-cut, by six men, at 4*l.* 10s. per fm. The western shaft to sink below the 50, by six men, at 10*l.* per fm. The new shaft to sink below the 40, by nine men, at 8*l.* per fm. The stopes in the back of the 50, on south lode, by four men, at 1*l.* 10s. per fm. The 26 to drive east of the new shaft, by two men, at 4*l.* 10s. per fm. The rise in the back of the 26, west of the new shaft, by two men, at 6*l.* per fm

back of the 50, the lode is producing 5 tons of ore per fm. In the western shaft, sinking below the 50, the lode is producing 1½ ton of ore per fm. In the rise in back of the 26 the lode is producing 2 tons of ore per fathom.

EAST CAMBRIAN (GOLD).—T. Faull, May 18: In conformity with your request, I have this day, in company with Mr. Dixon, examined the above mine. The following is a summary of my report, and the probable capital required to prove your property. I need not send you a long report, as you have one already from me, therefore I shall confine myself much to costs alone, commencing with Joe's shaft. In looking at the beautiful quartz coming from this place I would recommend the sinking of this shaft 10 fms. peeper; to do this you must have a small puffer steam-engine, which would cost, including cost of sinking 10 fms. of pitwork, &c., about 370*l*. In the meantime I would advise you to carry on operations in the western part of your sett, the same be confined to the development of the champion lode, which is very large, and of a kindly character here. You can explore either by driving on the course of the lode, or by a shaft on the junction of two masterly lodes (each producing gold-bearing quarts), which may be determined hereafter. You can raise any quantity of quartz, and while you are sinking Joe's shaft I would advise you to raise and operate upon 100 tons from the champion lode; this can be done by the erection of (say) four heads of stamps, which, with other machinery for amalgamators, &c., would cost somewhere about 200*l*.: this added to 370*l*. would make a sum of 570*l*., when with an additional 2000*l*. you would be able to prove your property, and ascertain its value. Total amount of capital required say 2570*l*.; but if indications are to be taken as a guide to mineral wealth, my opinion is, before you spend 1800*l*. you will be in a position to pay the cost of the mine, if not be giving profits.

EAST CLOGAU (GOLD).—K. Roberts, May 19: In No. 1 level, on St. John's lode, there is no change since my last; the ground has been stiff and wet, consequently our progress has been rather slow; at present it is easier for driving, and we expect shortly to get through this disordered ground, when we may expect an improvement in the lode. St. James's No. 2 level has improved since my last in size, and looks more favourable for gold. In St. John's cross-cut we have now completed the open lobby, and have shortened its length from 57 to 46 feet, have secured the entrance by strong retaining walls, and have commenced driving under cover.

EAST DARREN.—May 19: In the 116 cross-cut, north of Taylor's shaft, we have intersected the lode, and cut into it about 10 ft., which contains some small branches of lead ore, but not sufficient to value; we intend to extend this cross-cut a little further north to see if there be any better part of the lode before us. In the 104 east the lode is unproductive, being disordered by broken up ground. In the 104 west the lod is from 6 to 7 ft. wide, producing about 12 cwts. of lead ore per fm. The winze sinking below this level, east of cross-cut, still produces saving work of a low quality. In the 92 east the lode is from 4 to 5 ft. wide, but not looking quite so well as when last reported, now yielding 1 ton of lead ore per fm. In the 92 west the lode is from 2 to 3 ft. wide, principally composed of a dark blue clay-slate, sulphur, carbonate of lime, and unproductive for lead ore. In the 80 east the lode is from 5 to 6 ft. wide, principally composed of a dark blue clay-slate and carbonate of lime—unproductive for lead ore. In the 68 east the lode is from 5 to 6 ft. wide, principally composed of a dark blue clay-slate, blende, carbonate of lime, and lead ore, producing of the latter 2 tons per fm., and at present looks promising for a good run of ore ground.—Reed's Shaft: In the 80 west the lode is from 4 to 5 ft. wide, principally composed of a dark blue clay-slate, carbonate of lime, and spots of lead ore at times, but not a sufficient quantity to value. In the 68 west the lode is from 2 to 3 ft. wide, composed of a clay-slate and stones of lead ore, but not to value. The stopes and pitches throughout the different levels still continue to yield fair quantities of lead ore.

EAST DEVON CONSOLS.—Thos. Neill, May 19: The lode in the 70 south is still producing good stones of lead—much the same as last week. The lode north is looking very promising.

EAST JANE.—J. Seccombe, May 20: The lode in the 14 north is yielding 10 cwts. of lead per fm., with every prospect of continuance; in the same level south it is worth 3 cwts. per fm., and indicative of further improvement. In the rise in back of the 14 north the part of the lode being carried is poor, but we believe the productive part is standing to the east of us. The lode in the stope in back of 14 south is producing 3 cwts. of lead per fathom. In the deep adit north the lode is very promising, and more water issuing from the end.

EAST MARGARET.—R. James, W. Williams, J. H. Birch, May 21: In the 87 we have cut a branch 6 ft. north of the lode on which we have driven; it is 12 inches wide, worth 8*l*. per fm. In the 77 east the lode is poor, but the ground is changing, and letting out more water, and we are expecting an improvement. In the 77 west the lode is worth 6*l*. per fm. In the 67 west the lode is worth 4*l*. 10s. per fm. In the 67 east the lode is worth 6*l*. per fm. In the 67, west of cross-cut, the lode is worth 8*l*. per fm. In the 57 east the lode is improved, worth 10*l*. per fm. In the 47 the lode is worth 6*l*. per fathom. No other change.

EAST ROSEWARNE.—J. James, May 21: We expect to complete the alterations to the pitwork in Hallett's shaft this week, and resume the sinking on Monday next. In the 65 east the lode is 9 in. wide, producing good stones of ore, with a kindly appearance. In the rise over this level the lode is improving, now 1 ft. wide, worth 9*l*. per fm. In the 65 west the lode is small, but seems to be opening, and promising speedy improvement. The stope over the 65 west is worth 10*l*. per fm. The stope below the 55 east is worth 9*l*. per fm. In the sump-winze the lode is 18 in. wide, worth 25*l*. per fm. In the 55 west the lode is 1 ft. wide, worth 15*l*. per fm. The stopes over the 55 west are much the same as last reported, worth about 20*l*. per fm.

EAST TRESKERBY.—John Nancarrow, May 18: The ground in the 40 north still continues favourable. There is a good-looking orey lode in the back of the 40 east. The 55, both east and west, presents just the same appearance as last week. The lode in the rise is not quite so large as when we began.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, May 20: The lode in the engine-shaft, sinking below the 55, is from 18 to 20 in. wide, with a little ore and tin, embedded in quartz, &c.; it does not underlie so fast as it did, and the ground by the side is looking far more congenial than it has hitherto done. The ground in the 55 cross-cut is looking very kindly for mineral, but as yet we have not met with any lode. There is no change in the 55 west. The ground in the 45 cross-cut north is very favourable for exploring, and promising for mineral should we meet with a lode. The new lode in the 45, west of cross-cut, is 18 in. wide, composed of ore, quartz, and mundic—a very promising lode, but not enough to value. The branches in the 45 west are approaching, each is producing some good tin, hence we are looking forward for an improvement. The lode in the stope below the 45 west is worth 10*l*. per fm. There are two stopes in the back of the 45, each worth 8*l*. per fm.

EAST WHEAL RUSSELL.—J. Richards, May 20: Homersham's shaft is being sunk below the 120, to the south of the lode, in ground favourable for progress.—Homersham's Shaft: In Maynard's cross-cut north, in the 120, the lode has been cut through, proving it to be 8 ft. wide, composed of capel, iron, quartz, prian, and good stones of red oxide of copper. The cross-cut will still be continued for intersection of the north, or gossan lode, now being driven on in the 110, west of Fewin's cross-cut. In the 120, east of Maynard's cross-cut, on the north part of the lode, 4 feet of the lode is being carried, and is of the same composition as described above, with a small portion of red oxide of copper. In the 120, west of Maynard's cross-cut, on the north part of the lode, the lode, or part thereof being carried (4 feet wide), consists of gossan, prian, capel, mundic, and quartz. In Viger's cross-cut north, in the 120 east, the north, or ore bearing part of the lode, is intersected, and cut into 3 ft., composed of peach, quartz, mundic, and a little black oxide of copper, and is promising. In the 110 east, west of Fewin's cross-cut, on the north part of the lode, the lode is composed of capel, quartz, and a little gossan and mundic, with a little black oxide of copper occasionally. In John's stope, in the back of the 110 east, the lode is worth 10*l*. per fathom. In a new, or George's stope, in the back of the 110 east, and east of Hockridge's rise, the lode is worth 10*l*. per fm. In the 88 east, west of Mollard's cross-cut, on the north part of the lode, the lode, or part thereof being carried (3 feet wide), is composed of capel, mundic, peach, quartz, and a small proportion of copper ore. In Harvey's rise, in the back of the 66, the south portion of the lode being carried yields occasional stones of ore. In the 66 east, and east of Collin's cross-cut, on the north part of the lode, the lode is 18 in. wide, and yields a little yellow copper ore and green carbonate of copper. In the 45 east the drivage is on the south part of the lode, which is composed of flookan, mundic, and quartz. In Williams's cross-cut north, in the 88, west of Hitchins's engine-shaft, the ground continues favourable for driving.

EAST WHEAL TOLGUS.—May 20: The lode in the 34, east of John's shaft, is 15 in. wide, composed of peach, spar, and mundic. In the 34, west of the engine-shaft, the lode is 8 or 9 in. wide, composed of soft spar and mundic, and looking rather more promising. The 34 cross-cut south is still very hard. The ground in the adit cross-cut south is easy for spending.

FOWEY CONSOLS.—F. Puckey, C. Merrett, G. Job, May 11: Trathan's Lode: In the 270, east of Bottrall's shaft, the lode is still improving; it is now 5 feet wide, and worth 20*l*. per fm.—Bottrall's Lode: In the 270, east of same shaft, we have intersected a small cross-course, which has disordered the lode; the lode in the present end is 1½ ft. wide, letting out more water, but still poor for copper.—Hewett's Lode: In the 200, west of Union shaft, the lode has made a splice, and is now 1½ foot wide, worth 7*l*. per fm. During the past month we have commenced driving a cross-cut north from the south part of the lode, to ventilate this end, and in driving 3 fathoms we intersected a lode or branch 1 ft. wide, worth 10*l*. per fm.—John's Lode: In the 120, east of Cock's shaft, the lode is 2 ft. wide, of a very promising character, producing saving work for copper, and kindly for further improvement.—North Lode: In the 70 east the lode is 3 ft. wide, of a very promising apperrance, composed of quartz, prian, and peach, producing occasionally good stones of ore, but not sufficient to value; in the same level west the lode is 1 ft. wide, unproductive. In the 50 east the lode is 1 ft. wide, producing saving work. In the 30 west the lode is 2 ft. wide, worth 12*l*. per fm.

FRANK MILLS.—J. P. Nicholls, J. Cornish, May 20: The cross-cut in the 100 has now been extended west towards the lode 5 fms., and within one week from this time we hope to reach the eastern lode: the ground is still of the most promising description, and all that we could desire for the production of large quantities of lead ore. In driving the last 9 ft. we have passed through several pretty looking branches (the largest 1 foot wide), consisting of rich looking barytes and lead ore: all these branches are leady, and will yield in total ¼ ton per fm. The 72 north, on the west branch, is in disordered ground at present, and unproductive of lead ore to value; we expect, however, it will soon improve again. The stope in back of the 60 north, on same branch, is still looking very well, and yielding fully 1 ton of lead ore per fm. We have nothing new in any of our remaining tutwork operations to communicate. We may further state that our tribute department is looking much as it was at the last general meeting, and yielding about a similar amount of ore.

GARREG.—W. Sandoe, May 20: The lode in the end west of winze, in bottom of the 20, continues to produce a slight mixture of ore, and the ground is a little more favourable for driving, &c. In the end going east from No. 1 stope the lode is just the same in appearance as when last reported on. The rise in the back of this level looks a little better; the lode at present produces a nice mixture of ore, and seems to improve going up. In the end going west from south shaft the lode has a most promising appearance, and yields a little ore.

GAWTON.—G. Rowe, May 16: At the 36 west the north part of the lode has not been taken down during the past week. The stopes in back of this level are without change, yielding their usual quantity of ore—from 6 to 8 and 10 tons per fathom. The foundation of the engine-house is taken out, and the masons commenced the buildings. In the meantime a number of hands are employed raising stones, &c. So that no time will be lost in getting the new machinery in motion, and also the engine-shaft down to its required depth to intersect the lode.

GREAT BRIGGAN.—T. Trelease, G. Oates, May 16: Yesterday being our tutwork setting, we beg to furnish you with particulars of the same. Harvey's engine-shaft to sink below the 61, by nine men, for the month, at 35*l*. per fm. The ground is much improved in character, and now congenial for producing copper ore. The 61 to drive west of said shaft, by four men, 2 fms. or the month, at 8*l*. 10s. per fm.; lode 2 ft. wide, worth 10*l*. per fathom. This level to drive east of said shaft, by six men, 3 fathoms or the month, at 6*l*. 10s. per fm.; lode about 8 in. wide, producing a little ore, but not to value. Cross-course shaft to sink below the 49, by six men, 3 fms. or the month, at 13*l*. per fm.; lode 2 ft. wide, containing stones of copper ore. In the 49, east of the latter shaft, we have decided upon putting out a cross-cut south, not being satisfied that we are driving on the main part of the lode, and have set it to three men and three boys, 2 fms. or the month, at 6*l*. per fm. A cross-cut to drive south in the 42, to intersect the south branch, where it is in a pitch about 8 fms. west of this point, worth 12*l*. per fm., to two men and two boys, 2 fms. or cut the lode, at 6*l*. 10s. per fm. Tom's shaft to sink below the 32, by four men, 4 fms. or the month, at 4*l*. 10s. per fm.; lode 15 in. wide, producing stones of copper ore. The 42 to drive east of Trelease's shaft, by four men, 3 fms. or the month, at 6*l*. 10s. per fm.; lode 2 ft. wide, with a little ore, but not to value. The 42 to drive west of Hicks's winze, by two men and two boys, 2 fms. or the month, at 7*l*. 10s. per fm.; lode 2 ft. wide, worth 10*l*. per fm. Highburrow shaft to sink below the 35, by nine men, for the month, at 9*l*. 10s. per fm.; lode at present split in two branches, both producing a little copper ore, but not of much value. The 33 to drive east of said shaft, by two men and two boys, 3 fms. or the month, at 6*l*. per fm.; lode 3 ft. wide, worth 5*l*. per fm. A cross-cut to drive south of Trial shaft, by two men and two boys, for the month or cut the lode, at 50s. per fathom. There is nothing else new since our last report.

GREAT NORTH DOWNS.—T. Trelease, May 16: The lode at Vivian's engine-shaft, shaft, sinking below the 47, is 3 ft. wide, producing stones of ore. The lode at Jenkins' shaft, sinking below the 47, is 2 feet wide, worth 15*l*. per fm. The lode in the winze sinking below the 47 is 2½ feet wide, worth 8*l*. per fm.; the lode in the stope, east of Jenkins's, in bottom of this level, is 2 feet wide, worth 6*l*. per fm. Job's shaft is now being cleared 6 fathoms below the 50; ground in each end of the shaft all taken away. Peevor tin lode in the 17, east of Brown's shaft, is 3 feet wide, with a little ore, but not of much value. River shaft is now being cleared 7 fms. below the 50, and hope to reach the 60, or bottom of the shaft, in the course of a few days, where we have every reason to expect to find a good lode of ore, looking at the lode in Wheal Rose, near our boundary, and finding all the lode, both east and west of the shaft, taken away for a considerable distance.

GREAT RETALLACK.—Wm. H. Reynolds, May 19: There is nothing new in the state of the mine since my last report. We have sampled a parcel of blende, computed 43 tons, and one computed 8 tons, bids for which will be sent to the office on or before the 25th instant.

GREAT SOUTH TOLGUS.—J. Daw, May 20: The lode in Lyle's shaft, and in the 154 east and west, is much the same as reported last week. In the 125 west the lode is 1½ ft. wide, producing stones of copper ore. In the 100 west the lode is 1 ft. wide—a very promising lode. In the 60 fm. level west the lode is 2 ft. wide, producing 1 ton of ore per fathom.

GREAT TREGUNE CONSOLS.—W. Richards, May 21: The lode in the 92 east is 1½ foot wide, containing friable quartz, flookan, oxide of iron, mundic, and some rich quality copper ore. There is an increase of water issuing from the end. The lode in the 92 west is 5½ feet wide, and much more promising at present, being composed of friable quartz, flookan, oxide of iron, mundic, prian, and an increase of rich quality copper ore. The machinery continues to work well.

GREAT WHEAL BADDERN.—T. Hampton, J. Jenkin, May 16: Hill Brother's shaft is 8 fms. below the 63; the ground is as last reported, and the price for sinking unaltered. We have set the end to drive east of the tin shaft, to six men, at 3*l*. per fm. We have also set five pitches on tin from 9s. 6d. to 12s. in 1*l*., the average tribute being 11s. We expect to set more pitches as the ground is opened out shortly.

GREAT WHEAL BUSY UNITED.—T. Trelease, J. Petherick, E. Richards, R. Giles, W. Trelease, May 19: We have been engaged during the past week in cutting cistern-plat in Harvey's 130. In the 130, driving east of Harvey's shaft, the lode is 4 ft. wide, worth 18*l*. per fathom. The lode at Offord's shaft, sinking below the 120, is from 2½ to 3 ft. wide, worth 30*l*. per fm. for tin, of a very promising character. In the 120, driving east of said shaft, the lode is at present disordered by the elvans. In Ennor's winze, sinking below the 110, east of Offord's shaft, the lode is small and unproductive; the lode in the 110, east of said shaft, is still small and poor. In Trevenning's winze, sinking below the 100, the lode is 4½ feet wide, worth 20*l*. per fm. for copper and tin. The lode at Matthews' shaft, sinking below the 100, is 3 feet wide, worth 15*l*. per fm. for tin. In Nicholl's winze, sinking below the 100, east of said shaft, the lode is 7 feet wide, worth 40*l*. per fm. for copper and tin; the lode in the 100, east of same shaft, is 7 ft. wide, worth 12*l*. per fm. for tin. In the 100, driving west of Fielding's shaft, the lode is small and unproductive. The lode in the 90, driving east of Matthews' shaft, is 4 feet wide, producing a little tin, but not of much value. In the 50, driving west of Black Dog shaft, the lode is still very large, with the same promising appearance.—Boscawen Mine: The lode in the 70, west of Kitelee's shaft, is about 2 feet wide, containing good stones of copper ore, of a promising appearance. The lode at Hunter's shaft, sinking below the 70, is 1 foot wide, producing good stones of copper ore. The lode in the 70, driving west of the above shaft, is at present disordered by a cross branch, worth 5*l*. per fathom. The 60 bottoms are not yet drained. The lode in the 60, west of this shaft, is 1 ft. wide, composed of friable quartz, with stones of copper ore. The lode in the winze sinking below the 50, a few fathoms behind the 60 end, is 15 in. wide, producing good stones of ore, of a kindly appearance. Sampson's lode in the 30, east of John's shaft, is still disordered with the slide. Boscawen lode in the 30, east of said shaft, is small and unproductive, and we have decided on putting out a cross-cut south in order to intersect the caunter lode. Nothing else new to report in these mines.

GUNNIS LAKE.—J. Rodda, May 20: The lode in the engine-shaft, sinking below the shallow adit, when last cut through was 5 ft. wide, producing copper ore and tin to the value of 20*l*. per fm.; at present we are sinking by the side of the lode. In the rise in back of the 10 against the shaft we are carrying the copper part of the lode, which is producing 1 ton of ore per fm., leaving the tin part standing to the north, which when cut into last was worth from 15*l*. to 20*l*. per fm. The stopes in this level are producing 2 tons of copper ore per fm. The deep adit level driving west of cross-cut, on new tin lode, is looking just the same as reported last week, worth about 15*l*. per fm., cost of driving 7*l*. per fm.; the lode is of the same value, east of cross-cut, but we are not driving here, nor is it convenient for us to do so until we get away a little distance further with our western drivage; this lode adds considerably to the value of the mine, and will, in my opinion, yield large quantities of tin. There is nothing new in driving east, on south lode, or any other part of the mine. We shall sample on the next sampling-day a good parcel of copper ore.

GURLYN.—J. Curtis, W. W. Martyn, J. Rees, May 20: Since our last meeting, on Jan. 14, we have fixed a 12-in. drawing-lift in Wheal Fox flat-rod shaft, brought down main rods to the 30, and sunk the shaft 7½ fathoms below that level, and in about five weeks from this time we shall reach the 40, and by cross-cutting north 9 fathoms shall intersect Wheal Fox lode, at which point we anticipate good results, from the large and kindly lode passed through in the level above. By extending a cross-cut south at the same level 6 fms. Riche's lode will be met with, and from the valuable tin ground gone down in the 30 we fully expect the lode at that point will be more productive, as we have always found it improve in depth. The 30 is driven east of flat-rod shaft 56 fms., and for this driving has passed through a lode varying in size from 2 to 5 ft. wide, the backs of which will be taken away by tributers; the lode in the present end is 5 feet wide, varying in value from 10*l*. to 20*l*. per fm. The 20 is driven east 83 fms., and has passed though good tribute ground for the whole of this distance. By driving this level 24 fms. further it will be under Radford's shaft, and when communicated will lay open a long and valuable piece of mineral ground. The 20 is driven east of cross-cut 25 fms., on Riche's lode, and has opened tribute ground for this driving. The end has now reached the great cross-course, and by driving a few feet north the lode will be met with. The 20 cross-cut south, to intersect the south lodes, is progressing satisfactorily. The 10 is driven 18 fms. west of Radford's shaft, and we have about 6 fms. to drive to be over the rise in the back of the 20, which will be communicated in about ten days, and then the whole of the long run of this eastern part of the sett will be drained and ventilated, from which our returns will be considerably increased. The stopes and pitches throughout the mine are looking as well as for some time past. Our machinery is all in first-rate order, and we shall require nothing extra in the shape of pitwork or materials during the ensuing four months.

GWYDYR PARK CONSOLS.—Capt. Smyth, May 21: I have not taken down the lode in the deep adit since I wrote, therefore cannot report any change. No change to notice in Gwayn Lliflon adit since last week; the ground still continues tight, but I expect it will soon change. I am getting on well with the dressing, and hope to finish this week. I think it will come up to the estimate.

HARWOOD.—J. Race, May 15: There is no alteration worthy of notice in the mine since my report of last week.

— W. Vipond, May 19: The ends east and west from No. 3 rise have both improved since last week. The roof in the east end is looking particularly well to-day. Captain Race and I think it best at present to ventilate this working by a cross-cut from the old men's workings, which can be speedily done by a short cross-cut. I think all seems to be going on very well.

HAWKMOOR.—J. Richards, May 19: The lode in the 50 west is 1¼ ft. wide, with good spots of copper ore occasionally. In the 30, west of Graham's shaft, the lode is disordered. We have commenced a cross-cut south in the 20, east of the eastern engine-shaft, for the purpose of proving the south lode at that point.—West Hawkmoor: No. 3 lode, driving west, is small, composed principally of quartz, with spots of mundic and tin ore occasionally. In the stopes in the back of this level the lode is from 2 to 3 ft. wide, composed of peach, capel, and some good tin ore. In the winze sinking below this level no lode is taken down.

HINGSTON DOWN CONSOLS.—T. Richards, May 20: No important alteration has taken place in the mine during the past week.

KELLY BRAY.—S. James, May 16.—The lode in the 85 east is much the same in character as when last reported on; it is about 3 ft. wide, producing a quantity of mundic and good stones of ore—a strong kindly lode. The lode in the pitch in the bottom of the same level is still looking well, producing 4 tons of ore per fathom, worth 5*l*. per ton. The lode in the rise in the 85 east is 2 ft. wide, composed of quartz, mundic, and stones of ore, and looking promising to improve; the ground is of a congenial character, and such as is generally found in this mine. There is no change to notice in the 35 east in the past week; the lode is producing stones of ore, and the ground is easy for exploring. We intend to set the 25 to drive east in order to lay open tribute ground, as we have every reason to expect good results will accrue going east under the large gossan lode we have sunk on the surface further east than the present point of operation. The tribute department, on the whole, is looking encouraging, and holding out good promise towards the coming sampling. The lode in the pitches in the back of the 35 and 25 in places is worth from 20*l*. to 30*l*. per fathom.—Eastern Mine: The lode in the 70 east is letting out more water than it hitherto has, and is producing more fluor-spar and mundic—showing indications that there is every reason to expect a change for the better ere long.

LADY BERTHA.—Capts. Harpur and Metherell, May 18: In the 41 east the lode is from 2 to 3 ft. wide, composed of mundic, quartz, prian, and ore, worth of the latter 1 ton, or 4*l*. per fm. No change in the winze sinking below this level. In the rise above the back of the 30 east, towards the new shaft, the ground continues favourable for rising. In the winze sinking below the bottom of this level the lode is about 2 ft. wide, composed of peach, mundic, iron, and ore, worth of the latter 2 tons, or 6*l*. per fm. The lode in the 20 east is 2 ft. wide, consisting of capel, mundic, quartz, and some stones of ore. We have no material change to notice in the tribute department. The sinking of the new shaft continues to progress satisfactorily.

— Capts. Harpur and Metherell, May 21: We beg to say that since our report of Monday last no particular change has taken place in either of the ends throughout the mine. The winze in the bottom of the 30 east is worth 2 tons, or 6*l*. per fathom. We have a little improvement in a pitch in the back of the 41 east, the lode being worth 5 tons, or 15*l*. per fathom.

LEEDS AND ST. AUBYN.—J. Curtis, May 20: The flat-rod shaft to sink below the 10 fm. level 9 feet to complete the sump, sinking by nine men, at 8*l*. per fathom; the lode has varied in size from 6 to 18 inches wide, and in value from 5*l*. to 15*l*. per fathom. The 10 fm. level to drive west of ditto, by four men, at 1*l*. 8s. per fathom, and 3s. in 1*l*. tribute; the lode is 10 inches wide, worth 3*l*. per fathom: behind this end we have three tribute pitches, working by six men, from 6s. 8d. to 7s. in 1*l*. The 10 fm. level to drive east of ditto, by four men, at 1*l*. 8s. per fathom, and 3s. in 1*l*. tribute; the lode is disordered in the present end by cross branches, but gives such indications as justify the expectation of our having a good lode again before long. We have opened east of shaft 20 fms., and have set three pitches to six men, from 4s. to 6s. 8d. in 1*l*. Our last sale of tin, 4th May, 3 tons 1 cwt. 3 qrs. 15 lbs., realising 208*l*. 8s.; labour cost, 149*l*. 14s. 7d. Our next sale of tin will be about 270*l*.; labour cost, 164*l*. The prospects of the mine are daily improving, and I am more sanguine than ever as to future results.

MAUDLIN.—J. Tregay, May 16: No change to notice in the engine-shaft, neither in the 57 west end, since last reported. In the west mine, at the 10, we are making fair progress in driving the cross-cut, with small branches crossing it, and water issuing very strong therefrom. We expect to intersect the lode in a short time.

MERLLYN.—Wm. Sandoe, May 20: The winze sinking below the 20 continues to produce a slight mixture of lead ore. The bottom end south of shaft looks very promising, and yields saving work for dressing. The north end here is rather poor for lead at present. In the shaft sinking below this level the lode is now poor, but we expect soon to meet with a good run of orey ground gone down in the bottom of the level, north of shaft. For the past day or two we have been drawing out the water from the western shaft, so as to enable us to work the bottom level on the new east and west lode, from whence the water drove us some time ago. We shall finish the water to-day, after which I expect we may work dry here for some to come. This I consider a very important point, as if we can trace the lode to the east of the cross-course I think we shall find it to be a good lode. The water for dressing is very scarce indeed, but we are doing our best to prepare a small parcel of ore for sale as quick as possible.

MICHELL.—W. Sandoe, May 20: The engine-shaft is going down pretty well at present; the water is moderate, and the engine, &c., working satisfactorily.

MINERA UNION.—W. T. Harris, May 21: The 80 yard level is easier for progress; the lode is producing a little lead, and very promising. In No. 1 winze, sinking below the 60 yard level, the lode produces good stones of lead. In No. 2 winze the lode is 3 ft. wide, and producing good stones of lead.—Williams's Shaft: The lode in the 40 yard level south is worth 1 ton of lead per fm. The pitch in the back of this level is worth 2 tons of lead per fathom. The level driving west from the cross-cut is more promising, and a little lead occasionally. The pitches are without alteration to notice.

MOLLAND.—T. Bennetts, May 20: The lode in the rise in back of the 62 east is opening wider than last week, with stones of grey and yellow ore; ground moderate. The lode in the winze sinking below the 52 east has become settled, being out of the small slide referred to in my last; it is now 1¼ ft. wide, producing stones of ore. The stopes in the bottom of the 32 east are producing 1½ ton of ore per fm.; the lode here being large, and the white iron still predominating, renders the ore of low quality. The lode in the adit shaft is small, producing a few stones of ore; the ground seems to be getting easier.

NANGILES.—Jas. Rowe, May 20: We have driven the 90, east of the engine-shaft, 9 ft. during the last week; in the bottom of the end, and 3 ft. high, the lode is worth 12*l*. per fm. for copper; the lode is small in the upper part of the end. I never saw a more kindly lode than we have in the bottom of the shaft and the 90 end. The sumpmen are engaged this week in bringing down the skip-road to the 90, and cutting plat. We hope to commence sinking again next week. We shall drive the 90 east at the same time. The lode in the 86, Bread and Cheese shaft, is containing stones of copper. No change in the tin ground. We shall sample about 26 tons of copper ore on Wednesday next. Our water charges are easy, and machinery working well.

NETHER HEARTH.—W. Vipond, May 16: We have cut the east and west vein and find it worked by the old men both east and west down into the hazle. They have also driven a small narrow drift forward, or the cross vein, about 2 ft., but all is so filled up with rubbish that we cannot tell yet what the cross vein is like in the end. From work done on east and west veins they evidently had good ore, and I have all the better opinion now of the next vein, which we know is unworked. We have left off working the sump in the new level; there is no ore to value, and the water has become very troublesome. We have been working for the last three days on the cross vein from where we cut it in the level back towards the jack vein. We have got some good ore from it, and if it only continues as it is it will work to profit. We shall get the ancient workings cleared in two or three days, and then we shall see what the vein is like in the end of cross vein level.

NEW CROW HILL.—The following are the tenders for the lead ores:—No. 1, 29*l*. 0s. 6d. per ton; and No. 2, 14*l*. 8s. 6d. per ton. They were delivered on Saturday last, and the sale for the month realised 99*l*. 9s. 9d. The steam-whim works very satisfactorily, and so does the railway in the 55. All the stopes and levels are producing fair average work, and the stamps are working day and night.

NEW SOUTH CARADON.—R. Knapp, May 20: Good progress is being made in sinking the new engine-shaft. We have risen from the adit, and communicated with it; the men are now engaged in squaring it down, timbering it, &c. No. 1 lode is still very promising, 2 ft. wide, and tinny throughout, but not quite so good as when last reported, worth now 8*l*. per fm., and looking well to improve. We have a good pile of tinstuff at the surface, and are daily adding to it. We shall lose no time in getting the machinery erected, both for pumping and stamping. We think our prospects of success are gradually increasing.

NEW TRELEIGH.—S. Michell, May 20: Our tutworkmen that were employed driving our levels at Good Fortune and Carr's have been engaged at the capstan for a day or two, sending down castings in Good Fortune shaft, &c., consequently there is not much alteration in the ends since last week, with the exception of the 70, west of Carr's engine-shaft, which is discharging a very large stream of water, and draining the country for a considerable distance round about, even so far south as Nicholson's, which shaft is nearly dry to the 20, and the water still sinking, but shall be able to say more about it next week. Our stopes still retain their former productiveness, and the tributers are getting their ores to surface, and clearing their pitches of deads, &c., for the letting on Friday next. The sumpmen are going on as fast as we can expect with the work at Good Fortune. Our dressing, &c., for the next sampling is progressing favourably.

NEW WHEAL MARTHA.—G. Rickard, May 21: The ground at the engine-shaft for the past week has improved, and shows strong indications that we are getting near the lode. The lode in the 64 west is composed of fluor-spar, capel, and mundic, with good stones of copper ore, worth of the latter 3 tons per fm. The lode in the 64 east is full 5 ft. wide, composed of arsenical mundic and copper ore, worth of the latter about 1½ ton per fm.—a very kindly lode. The lode in the 52, west of No. 1 cross-cut, is producing 2 tons of copper ore per fm. The lode in the 52, east of No. 2 cross-cut, is yielding 10 tons of copper ore per fm.; this end has been driven 14 fms., and has yielded for the whole distance 12 tons of copper ore per fm. The lode in the winze sinking below the 52 is composed of white iron, fluor-spar, and mundic, with stones of copper ore. The lode in the stopes is yielding 14 tons of copper ore per fm. The lode in the stopes in bottom of the 40 is producing about 4¼ tons of copper ore per fm. The lode in the 10, west of Thomas's shaft, is 4 ft. wide, composed of capel, spar, and mundic, impregnated with spots of copper ore. There is no material change worthy of any remark since last week. We are busily engaged in dressing and carting our ores to quay for the next sampling.

NEW WHEAL PROSPIDNICK.—Wm. Bishop, jun., May 16: This week another branch has dropped into Watson's engine-shaft from the north, composed of spar, jack, and a little tin; the ground is also good for sinking and the production of tin; to-day I made a good van of tin from the lode; surely these droppers, and the favourable change in the ground, will tend to enrich the lode shortly. The 30, west of this shaft, is without change to notice since last reported; the same remark will apply to the 30 fm. level cross-cut south. We have made better progress in sinking the new engine-shaft during the past week.

NORTH BASSET.—T. Glanville, G. Davey, May 15: Tutwork Setting: The rise in the back of the 152 fm. level, by six men, at 11*l*. per fathom. The 142 fm. level to drive east of flat-rod shaft, by four men, at 11*l*. per fathom; the lode is 2 feet wide, producing stones of copper and tin ore. The 132 fm. level to drive east of the flat-rod shaft, by four men, at 10*l*. per fathom. The trip-plat to cut at the 102 fm. level, at 9*l*. per fathom; also Grace's shaft to sink under the 102, by nine men, at 22*l*. per fathom; the shaft is suspended for the present until the plat is cut. The 102 fm. level to drive west of Grace's shaft, by four men, at 8*l*. per fathom. The 102 cross-cut to drive south, by four men, at 9*l*. per fathom. The 102 fm. level to drive west of the cross-cut on the south lode, by four men, at 13*l*. per fathom; the lode is 2 feet wide, producing a little tin. The winze to sink under the 92 fm. level, by four men, at 17*l*. per fathom. The winze to sink under the 82 fm. level, by four men and two boys, at 15*l*. per fathom; the lode is 3 ft. wide, producing saving work for tin. The 52 cross-cut to drive north of Grace's shaft, by four men, at 9*l*. 10s. per fathom. The 42 cross-cut to drive south of the western shaft, by four men, at 16*l*. per fathom.

NORTH DOLCOATH.—Joseph Vivian, James Paull, May 20: The engine-shaft is now about 6 ft. below the 60, where the lode is 4 ft. wide, producing good stones of yellow copper ore. The lode is just getting clear of the cross-course, which has a western underlie, and is now in the western end of the shaft, where the lode is still partially mixed with it; but in the eastern end the lode is more settled, and contains a good stone of ore. The present appearances are certainly very promising for further improvement. In the 60 east the lode is 4 ft. wide, unproductive. In the same level west the lode is 3 ft. wide, composed principally of flookan. In the 47 east there is a very fine looking lode, 6 ft. in width, producing occasional stones of ore, and looking likely to improve. In the same level west the lode is 4 ft. wide, producing occasional stones of copper ore. In the deep adit, driving east on the north lode, we have cut through the caunter, which is 4½ fms. in width. We now purpose driving north-east on the south-eastern wall, for the purpose of intersecting any other lode that may be in the neighbourhood of it.

NORTH DOWNS.—F. Pryor, J. Grenfell, May 20: In the 72, east of King's shaft, the lode is 2 feet wide, composed of spar, mundic, blende, and producing fine stones of ore, but not enough to value; the end has a very promising appearance. The 60, east of this shaft, is also producing good stones of ore. The winze sinking below the 50, and a little in advance of the 60 east, has a very promising appearance; lode 2 feet wide, worth for length of winze (8 feet) 16*l*. per fathom. There is no change to notice in the 50 east since last report. The 40, east of Bennett's, is producing about 1 ton of ore per fathom; but we are daily expecting to cut the county cross-course. The winze sinking below this level is not looking so well as it was, now producing 1 ton of ore per fathom. We are getting on pretty well with sinking Bennett's shaft, and hope to be down to the 60 by our next setting day, when no time will be lost in cross-cutting to cut the lode at that level. We sampled on Tuesday, the 12th inst., 198 tons of ore.

NORTH LAXEY.—R. Rowe, May 19: The lode in the shaft sinking below the 50 continues as good as last reported; worth 2 tons of ore per fm. We were in hopes that the 50 end driving south had got clear of the range of disordered ground, but it seems not the case just now; the lode is again being traversed by a run of hard mountain spar, diminishing it in size and value from that last reported on; the end is still producing a little ore, and I am confident there is better producing ground ahead of us.

NORTH MINERA.—May 21: Eastern Shaft: We are progressing with the sinking of the shaft as fast as possible, and from the appearance of the ground I expect an improvement shortly. The winze sinking under the 45 yard level still continues in [illegible] shale. The pitch in back of the 15 is looking well, and the men will earn good wages.

NORTH NANT-Y-MWYN, (LEAD).—E. Williams, May 18: I have been through the workings in the old mine, and have seen the bottom of the shaft, and am glad to tell you that it is looking highly promising, there are large lumps of solid ore, and there is ore also to be seen in the backs. The lode is standing north and south of the lower stope under the level. It would be advisable at once to break away the ore, and constantly draw it to the surface; for this purpose I will put an extra man on. Two extra men will also be required to clear the top level in the western part of the mine.

NORTH TRESKERBY.—R. Pryor, R. M. Kitto, May 21: The lode in the engine-shaft sinking below the 90 is 4 feet wide, producing rich stones of ore, and as all the water is coming from the bottom of the shaft we fully believe that the day is not far distant when a great discovery will be met with at this important point. The lode in the 90, east of shaft, is 3½ feet wide, composed of mundic, peach, and spar, with good stones of ore. The ground is still getting easier for driving, which is a favourable indication; the lode in this level, west of shaft, is 5 feet wide, with good stones of ore. The lode in the 77, east of shaft, is at this time a little disordered by a cross branch, and not so good as when last reported on. This level has opened up favourable ground for 25 fathoms in length, and this end will be communicated to the 77, west of Tresidder's shaft, in about a month from this time, when we shall at once resume the sin

PEDN-AN-DREA UNITED.—W. Tregay, T. Delbridge, J. Thomas, May 16: The sump-shaft is worth 50*l.* per fm. for the length carried, 15 ft., and no north wall. The 120 east end is worth 15*l.* per fm. The 129 west is worth 15*l.* per fm. The 110 west end is worth 5*l.* per fm. The 100 east is poor. The 100 west end is worth 10*l.* per fathom. The rise in the back of this level is worth 20*l.* per fathom. The 100 west, on Skinner's lode, is worth 7*l.* per fm. The 90 west end, on engine lode, is poor. The 90 west, on Martin's lode, is worth 3*l.* per fm. The winze in the bottom of this level is worth 16*l.* per fm. The rise in back of the 80 is worth 3*l.* per fm.—Cobbler's: The 90 east end is worth 7*l.* per fm. The 68 west end is worth 5*l.* per fm. Our pitches are producing the usual quantities of tinstuff. The improvements reported last week continue the same.

PENDEEN CONSOLS.—J. Warren, May 16: In consequence of a small breakage to our engine rods we could not measure or set at the 142. The 130 north has been driven 2 fms. 6 in.; lode 3 ft. wide, worth 6*l.* per fm. for tin. The 130 south is driven 2 ft. 6 in.; lode 3 ft. wide, worth 40*l.* per fm. for tin; we should have driven more ground, but the men have been engaged in putting in tramroad. The 118 north is driven 1 fm. 1 ft. 9 in.; lode poor. The 118 south is driven 3 fms. 1 ft. 3 in.; lode 3 ft. wide, worth 15*l.* per fathom. The stope behind the same is worth 20*l.* per fathom for tin. No. 1 winze, sinking below this level, is sunk 4 fms. 3 in.; we shall be taking down the lode in the winze in course of next month, when you shall be advised of its value. The 106 north is driven 1 fm. 3 ft.; lode poor. The 106 south is driven 3 fms. 6 in.; lode 3 ft. wide, worth 18*l.* per fm. In the rise in the back of this level the lode is worth 15*l.* per fm. The 94 south is driven 2 fms. 2 ft.; lode 3 ft. wide, producing tin, but not sufficient to pay. The 82 north is driven 4 fm.; lode small and poor. The 82 south is driven 4 fms. 6 in.; lode 1½ ft. wide, producing tin, but not sufficient to pay. The adit level south is driven 3 fms. 4 ft. 6 in.; lode small and poor. The copper stopes in the north part of the mine, two in number, are worth on on average 8*l.* per fm.

PRINCE OF WALES.—J. Gifford, May 21: We have nothing new to report on. The men are getting on satisfactorily with their work both in the shaft and adit level.

PROSPER UNITED.—S. Lean, W. H. Martin, May 21: The lode in the 60, west of Louisa's diagonal shaft, on the south part, has much improved in the past week; it is 3 ft. wide, and will yield 3 tons of ore per fm. The lode in the 60 west, on the north part, is still in disordered ground. The lode in the 60 east will produce 1 ton of ore per fathom. The lode in the 50 east is 2 ft. wide, saving work for tin. The lode in the 60, east of Hill's shaft, is 1 foot wide, containing stones of rich grey ore. The lode in the 60 west is 3 ft. wide, worth 6*l.* per fm. for tin. The lode in the 50 west is 4 feet wide, and will produce 2 tons of ore per fm. The lode in the winze sinking below this level, just behind the end, will produce 2½ tons of ore per fm. The lode in the 50, east of Hill's shaft, on the south part, is worth 8*l.* per fm. for tin. There is no change in the eastern part of the mine to notice since our last report.

PROVIDENCE.—W. Hollow, P. Rogers, W. Dunstan, May 20: Higgs's Shaft: The standard lode, in the 65 east, is small, and nothing to value. The cross-course north in this level is worth 10*l.* per fm. In the 75 east the standard lode is confused by a cross-course, but nothing to value. The north part of the lode in this level is worth 16*l.* per fathom. The standard lode, in the 85 east, is 2 ft. wide, producing tinstuff of low quality; it has a kindly appearance for making tin.—New South Lode: The lode in the 75 east is worth 10*l.* per fm. No. 1 stope, in the back of this level, is worth 40*l.* per fm.; No. 2 stope, in the back of this level, is worth 70*l.* per fm. The stope on the cross-course has improved, now worth 60*l.* per fm. The stope on the branch is worth 40*l.* per fm. The stope on the middle branch is worth 30*l.* per fm. The stope on the south branch, in the back of the 75, is worth 25*l.* per fm. The lode in the 65 east is worth 15*l.* per fm. The following is our settings for June:—69 men on tutwork and 101 on tribute, at an average of 8s. 2d. in 1*l.*

REDMOOR.—T. Taylor, May 18: During the past month we have driven the 40 cross-cut, north from Johnson's lode, 2 fms. 1 ft.; in this drivage we cut a cross-course 1 foot wide, to the north of which the ground is letting out more water; now set to four men, to drive at 10*l.* per fm. The lode in the 30 west, on Johnson's, is 2 ft. wide, worth about 7*l.* per fm.; set to drive by four men, at 4*l.* per fathom. We have on tribute ten men at 12s., and two men driving the 40 end east, on Johnson's, at 30s., and 12s. tribute.

RHOSWYDOL AND BACHEIDDON.—E. Davies, May 19: Not having cut the lode, and the distance driven in the 43 fm. cross-cut being sufficiently long prevented the water from bottom of the engine-shaft coming directly from the lode; I surveyed it to-day, and I think the lode comes down in its regular underlay, therefore at that underlay we shall have to cross-cut nearly 6 ft. more. The water most likely comes from a flat running at right angles from the lode; there is no doubt of the water coming indirectly from the lode, as the springs in it have considerably diminished. The cross-cut goes on well, and provided the lode comes down in its regular course we shall be very near it by this day week, if not cut it.

ROARING WATER.—Captain Thomas, May 18: The stope on Grady's lode is producing rich purple and yellow copper ore and malachite; the lode is about 2 feet wide, 1 ft. of which is fit to put to pile for sale; there are now about 8 tons of ore broken from this lode at surface. I have given directions to put on some more hands to bring up a deeper stope, the richest part of the lode is in the bottom of the stope. The Orchard lode is also looking well going east, and promises further improvement.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, May 20: In the 30, east of No. 2 cross-course, the lode is worth 10*l.* per fm. In the 60, east of Ellen's shaft, the lode has a promising appearance, producing good stones of ore. No alteration in any other part of the mine since last week.

ROYALTON.—T. Parkyn, May 21: We have cut through the black lode, and find it to be 6 ft. wide, with good saving work throughout. We are now driving west on the great lode; we shall drive 2 fms., and then cut out to the south wall. Our prospects are the same as formerly reported.

SILVER VEIN.—E. Burn, May 21: The sinking of the engine-shaft is progressing favourably; the lode is 2½ feet wide, composed of flookan and gossan, producing saving work; a still further improvement may be expected as the shaft gets out of the influence of the east and west lode. In the 30 north the lode has taken a horse of killas, altogether it is 10 feet wide, worth 10*l.* per fm. for fahlerz; set to drive at 5*l.* per fm. In the 30 south the lode appears disordered; I have set the men to drive west, at 3*l.* per fm., 2 fms. stent. I think we shall discover a part of the lode, which I consider is split off from that which we have been driving on. In the winze the lode has considerably improved; it is composed of blue flookan and quartz, probable worth at present 7*l.* per fm.; set to six men, at 5*l.* per fm., 5 fms. stent. All the filling and landing to four men for 1 month, at 12*l.* 10s. On tribute—No. 1 pitch in the 30, to three men, for two months, at 6s. 8d. in 1*l.*; No. 2 pitch in the 30, to two men, for two months, at 5s. in 1*l.*; No. 3 pitch in the back of the 20, to three men, for two months, at 6s. 8d. in 1*l.*; No. 4 pitch in the 20, to two men, for two months, at 10s. in 1*l.* We sold on the 9th, computed 28 tons of silver and copper ore, realising about 200*l.* We shall sample next week about 25 tons. On the whole, our mine is looking more encouraging than it has been for some time past.

SMITH'S WOOD.—W. Hosking, May 20: I am pleased to inform you that the increased value of the lode at the engine-shaft is continuing. We have, since my last report, cut through it, and find it 3¼ feet wide, the whole of which is saving work of good quality. The ground is very hard and spare for sinking. We are, however, applying the greatest possible force in order to reach the 34 as early as possible, which we are very anxious to reach, with a view to extending our level east and west, where, if the lode continues so productive as at present, we shall render our workings remunerative.

SORTRIDGE CONSOLS.—R. Jackson, May 21: In the 50 west of Mayn's cross-cut, on No. 2 south lode, the lode is 1½ ft. wide, yielding a little ore. In the 50, west of ventilating shaft, the lode is 9 ft. wide, composed of spar, capel, mundic, and a little ore. In the 40, west of John's cross-cut, on No. 2 south lode, the lode is 2 ft. wide, yielding good stones of ore. In Stanton's cross-cut north in the 50, towards the tin lode, the ground is easy for progress. In the 40, west of Gilbert's cross-cut, on No. 1 tin lode, the lode is 3 ft. wide, worth full 15*l.* per fm. In the 40, east of Gilbert's cross-cut, on No. 1 tin lode, the lode is yielding some good stones of tin. In the 30, east of Pellow's cross-cut, on No. 1 tin lode, the lode is 2 ft. wide, composed of spar, capel, and stones of tin. There is no change to notice in any other part of the mine.

SOUTH CARN BREA.—T. Glanville, May 20: In the stopes in back of the 108 the lode is worth 20*l.* per fm. In the 68, driving west of the cross-cut, the new lode is worth 10*l.* per fm. In the same level, driving east, the lode is worth 7*l.* per fm. In the rise in back of the 68 the lode is worth 8*l.* per fm.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, May 16: Since my last report we have apparently cut through the elvan course in the 90 cross-cut north, granite having made its appearance. I hope we shall now make better progress.

SOUTH CRENVER.—E. Chegwin, May 19: In the 124, driving west of flat-rod shaft, the lode is 2½ ft. wide, producing 2 tons of copper ore, worth about 12*l.* per fm. In the 124, driving east of flat-rod shaft, the lode is 1½ ft. wide, producing stones of copper ore, but not to value. In the 105, driving east of flat-rod shaft, the lode is 3 ft. wide, producing 2¼ tons of copper ore, worth about 11*l.* 10s. per fm. In the 105, driving west of flat-rod shaft, the lode is 2½ ft. wide, producing 2 tons of copper ore, worth about 8*l.* per fathom. Our tribute pitches are without change to notice.

SOUTH DARREN.—J. Boundy, May 19: The lode in the 30, west of the air-shaft, has much improved during the past week. Although the lode in the end at present is not quite as large as when last reported, it is yielding work of a richer quality than before—present value, 1 ton of lead ore per fm., with a fair prospect of a further improvement; the extension of this end, through which is laying open very profitable ground, being whole to the surface. The lode in the 20 west is looking exceedingly promising, with a good rib of lead ore up and down the end. Looking at the prospects in the above-named points, I consider they are more cheering than they have hitherto been, and the results depend entirely upon the development of the new ground both east and west of the present workings. Other places are without any change to notice.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, May 20: In the rise in the back of the 50 the lode continues 2 ft. wide, producing stones of good ore—dressing work. In the 12, east of the flat-rod shaft, the lode is 1½ ft. wide, at present unproductive. In the flat-rod shaft, sinking under the 12, the lode is 1 ft. wide, producing good ore—tribute ground.

SOUTH EXMOUTH.—J. P. Nicholls, G. Mander, May 20: The engine-shaft is completed to the 60, and bearers fixed to carry a plunger-lift. The shaftmen are now engaged opening a tip-plat in this level, which will be finished in a day or two, when we shall without delay prepare to send down and fix the plunger-lift, and at the same time put a pare of men to drive the cross-cut so as to intersect the lodes in this level as early as possible. The 45 north, on west lode, is forth to the winze sunk in bottom of the 30, which we are now rising against to effect a communication, the lode is larger than the width of the rise; the part we are carrying is yielding some saving work, but it is not so rich as the lode in the winze, where it is worth full 1½ ton of lead ore per fm.: this induces us to think we are not rising on the same part of the lode as the winze is sunk on; however, this will be perceived in a few days by effecting the communication. The west lode in the 45 south is 4 ft. wide, consisting chiefly of barytes and quartz, embedded in a soft channel of ground, and altogether presenting a favourable appearance for soon becoming valuably productive. The best of the ore ground driven through in back of this level is becoming exhausted, the two stopes now working are yielding 8 cwts. per fm. each. In the 45 north, on east lode, the lode is the entire width of the end; it is comparatively unproductive at present, but, judging from its favourable appearance, we think it cannot fail to produce large quantities of lead at a deeper level, if it should fail to do so at the present depth. The lode in the 30 south is 5 ft. wide, consisting of spar and gossan; the stope in back of this level, north of air-shaft, is yielding from 6 to 7 cwts. per fm. There is no other alteration worthy of remark.

SOUTH WHEAL TOLGUS.—May 20: Youren's Lode: In the 140 west the lode is 15 in. wide, consisting of peach, mundic, and spar. The lode in the 130 west is 20 in. wide, producing 2¼ tons of ore per fm. We have three stopes over the back of the 130 west, each stope producing 3 tons of ore per fm. The lode in the 120 west is small and poor. In the 110 west the lode is 20 in. wide, producing good stones of ore, and looking promising. The lode in the winze sinking in bottom of the above-mentioned level is 2 ft. wide, yielding 3 tons of ore per fm., and the stope over the back of the said level is producing 3 tons per fm. The lode in the 100 west is small and unproductive. In the 90 west the lode is 20 in. wide, producing good stones of ore—a kindly lode. The lode in the 78 west is small and unproductive.—South Lode: The ground in the 140 is moderately easy. In the 130 east the lode is 2 ft. wide, producing 1 ton of ore per fm. The lode in the 120 east is 2 ft. wide, consisting of peach and spar, and producing 1 ton of ore per fm. The lode in the 110 east is 3 ft. wide, composed of peach, spar, and soft killas. The lode in the 100 east is 2 ft. wide, unproductive. The stope in bottom of the 100 east is yielding 3 tons of ore per fathom.

ST. DAVID'S (GOLD).—T. Faull, May 20: Our prospects continue very encouraging, the result of last week has been satisfactory, presenting a prospective assurance of success to all concerned, and every available point should be prosecuted with vigour. I am much pleased to inform you that our prospecting for gold on the banks of the River Mawddach has been successful; the result will be made known when Mr. Bridell, one of your directors, returns to town. No one need be surpised to hear of gold being found in the bed of this ancient river, more especially when we bear in mind that from time immemorial the rich mountain streams of the Cwmheisian, the Dolfrwynogs, the Cefncoch, Prince of Wales, and the Clogau Mines have been tributaries to this extraordinary rich river. The undertaking carries with it the elements of success, and the profits to be derived therefrom will be astounding.

ST. DAY UNITED.—E. Ralph, J. Cock, May 19: Opie's shaft is sunk 10 fms. 2 ft. below the 174 fm. level; we intend sinking 3 ft. deeper for fork before we begin to drive. The lode is worth about 50*l.* per fathom for the length of the shaft. In the 174 end, west of Billings', the lode is 5 ft. wide, and worth 30*l.* per fm. We expect to begin to drive east of winze and east of Billings' in a day or two, where the lode is worth 30*l.* per fathom. The winze sinking below the 164, west of Billings', is suspended for the present in consequence of being down to the water, and in the 164 end, west of Billings', the lode is 2 ft. wide, and worth 10*l.* per fathom. In the 154 end, west of shaft, the lode is 2 ft. wide, and worth 12*l.* per fathom. In the winze, sinking below the 144 fm. level, the lode is 3 ft. wide, and worth 12*l.* per fathom. There is nothing new to report on, either at Bissoe Pool or the western part of the mine. All the operations, both underground and at surface, are carried out with satisfaction.

ST. JUST CONSOLS.—W. Williams, May 20: Since my last report we have been extending the deep adit level with all speed, as we want to cut the Guide lode in this level as soon as possible, to be able to draw the tinstuff from the lode to the stamps. The Guide lode in the shaft, a few fathoms before the deep adit end, is more than 6 feet wide, tin from wall to wall. The stamps axle is now on the mine, and to-day I hope to get it in its place, and soon to have the wheel got ready. I have several men clearing ground for the dressing-floor. On the whole, we are getting on very well.

ST. JUST UNITED.—J. Carthew, May 19: We have forked the water to the bottom of the mine, which is 63 fms. below the adit; through the bottom, or 62 (as it has been hitherto called), we have been east of the engine-shaft upwards of 60 fms., on Saveall's lode, and 30 fms. on Wheal Bozand's lode; the late workers left such a quantity of tinstuff that we are unable to get into either of the ends, but we observe a great quantity of tribute ground in the backs over the level; the great quantity of tin ground in the 63 and 50 east, and the copper lode in the 40 west, now laid open, encourages me to use every endeavour to get the steam-whim at work in the engine-shaft without any delay. In the bottom level we have been able to go on the north lode 180 fms., east of the engine-shaft, and in the back of this level also we observe a long run of tribute ground. Not a day will be lost in getting the north lode shaft down to the bottom level, and the skip-road in; we have to-day increased the number of men on this work, having put nine in the shaft, and six to rise against them in the back of the 63. I hope in a short time to have double the men we have at present breaking tin. There is no doubt but we have a first-rate run of mines, and I never saw them looking so well before.

TOLCARNE.—May 16: The 50, east and west, is composed of gossan and spar; lode 2 feet wide. The 40 east is in a promising lode, 18 in. wide. In the 30 east the lode is 2½ feet wide; in the 30 west the lode is 15 in. wide, both poor. Three winzes set to ventilate the 10, 20, and 30. The winze below the 10 is yielding 1 ton of ore per fm.—New North Lode: The 40 is still in hard ground. The 30 east yields 1 ton per fm. Two winzes below the 20, east and west, produce 1 ton of ore per fm.—King's Lode: The shaft is set to sink below the 12, at 21*l.* per fm. In the 12 west the lode is 20 inches wide, composed of fluor-spar and gossan. The new eastern shaft is sinking in favourable ground, at 5*l.* per fm. The adit level cross-cut south is still in hard ground; the end is also very wet.

TRELOWETH.—T. Richards, May 20: Cole's engine-shaft is sunk below the 154 about 4 ft., and the lode has a promising appearance for mineral. The lode in the 154 end east does not contain so much ore as at the last report. The 144 end, east of engine-shaft, contains more ore. The 144 end, east of sump-winze, never looked better than at present, worth 24*l.* per fm. The 134 east contains more ore, and will nearly pay for driving it. In cross-cutting north to cut the north lode, driving upon Woodfall's cross-course, the ground is easy, and a good looking killas. Carr's shaftmen have been employed cutting plat, and the lode contains some good copper ore. The pitches are looking just as usual.

TRELOW.—Wm. Terrell, May 20: We have driven the level both south and east at 11s. per fm., and 5s. in 1*l.* Both lodes have good leaders of lead, with white iron, quartz, prian, and flookan. We are within 50 fms. of the lodes worked by the Messrs. Taylor, and by our east and west lode shall soon cross-cut their lodes.

TREWEATHA.—T. Foote, May 19: In the 40, north and south, the lode is 3 ft. wide, but is disordered by a horse of killas, and is at present poor for lead, but from the appearance of the lode it will soon improve again. We are making good progress in driving the Tye level at the 30 south, and hope to have this end home to the south part of the run in the old level by the end of this month. The lode in the rise in the stope in this level is producing 4 cwts. of lead per fm. The two stopes in the back of this level are each yielding 3 cwts. of lead per fm. The water in the old mine is sinking very slow, and we expect that it will continue to do so until such time as we cut into the lode again from the Tye level in the 30 south.

TRUMPET UNITED.—G. R. Odgers, May 16: We have resumed the sinking of the engine-shaft below the 50; the lode is 8 in. wide, and yielding a little tin. The lode in the 50 west is 10 in. wide, producing a little tin—a kindly lode. The lode in the 38 west is from 6 to 8 in. wide, yielding some very good work for tin—a most promising lode. The lode in the 25 west is from 10 in. to 1 ft. wide, worth 6*l.* per fm., and improving. The lode in the 15 west is from 6 to 8 in. wide, producing good stones of tin—saving work. The lode in the winze sinking below the 15 is worth 12*l.* per fm. The lode in the stope above the 15 is worth 6*l.* per fm.

TYDDYNGLWADIS (SILVER-LEAD AND GOLD).—Capt. Williams, May 18: Adit Sinking: In two more days I expect to complete room for the tram-road, so that we may fix a stull to commence our sinking, and lay down the tramway. At No. 4 winze we are pushing on with the stull, so as to commence our sinking. I have not yet found men to take the bargain from No. 2 to day light.—Cwmheisian Isaf—No. 2 Adit: Our progress in driving on this being 2 ft. 9 in., the lode is much the same in size, about 14 in. wide, with well-defined footwalls. All surface works are progressing favourably.

TYWARNHAILE.—J. Nicholls, J. Daw, T. Hampton, May 20: The 100, east of Gardiner's shaft is producing about 5 tons of per fathom. The 90, east of Bennett's, is producing 2 tons of ore per fathom. The 80, east of Bennett's, is yielding stones of ore, but not at present enough to value. James's shaft is worth 3 tons of ore per fathom for length of shaft. The 80, west of James's, is hard and poor. Haynes's shaft is without change. The 80, east of Haynes's, is poor. The 70, west of Haynes's, is worth about 1 ton of copper ore per fathom. The tribute pitches are without change to notice.

UNITED DOLFRWYNOGS (GOLD AND COPPER).—Capt. Williams, May 18: Bog Shaft—West Driving: Our progress in driving on this for the last week is 5 ft. 6 in.; we came to a change of ground on Saturday. I fully anticipate that my expectations will be fulfilled by cutting another lode in a few days. I would propose that an easterly driving should be commenced as soon as the pump is down, so as to cut the other lode east of our present shaft. At the surface we are busy making wheel-pit and other preparations, so as to get to work as soon as possible.—Penbryn Mine, Cross-cut: Our progress in driving on this since last reported being 13 ft. 6 in., we drove through a beautiful leader of flookan, &c., about 1 ft. wide. At the Buarthrey Mine there is no change since last reported.

VALE OF TOWY.—A. Waters, T. Harvey, May 19: The bottom end going south of Clay's engine-shaft continues in hard ground, which retards our progress; the part of the lode being carried is 3 ft. wide, composed of sulphate of barytes, carbonate of lime, blende, and spots of yellow copper ore, but not to value. The lode in back of the 110, south of said shaft, will yield 2 tons of blende per fm.; ground very favourable for progress. Lee's pitch, in the 100, south of shaft, is yielding blende in profitable quantities. Matthew's pitch, in the 100, south of Field's, is yielding fair remunerative quantities. Shipland's pitch, in the 100, south of Lewis's winze, is worth 1 ton of blende per fm. We have let a pitch in the 100, north of shaft, at 25s. per ton of blende. Lewis's pitch, in back of the 90, south of engine-shaft, is yielding fair average quality blende stuff. The barytes pitches are yielding on the average 5 tons per fm.; ground soft. The 50, north of slide, on Derrick lode, is as last reported, no lode having been taken down this week. In the 40, north of slide, the said lode is 2½ ft. wide, composed of carbonate of lime and barytes, with large patches of lead ore throughout. In the 20, north of Bonville's, the lode is 18 in. wide, making stones of lead ore against the hanging-wall. The tribute pitches in the lead department are much the same as for some time past. We have shipped per *Anna Maria* a cargo of best quality blende, and have 30 tons more at surface preparing for shipment. We calculate shipping 100 tons of barytes during the current month.

WEST BEAM.—W. Hosking, May 21: The improved value of the lode at the 65 end, west of Parry's shaft, as spoken of in my last report, continues, and the length of ground through which it has continued establishes it a permanent shoot of tin. We are forcing the drivage of this end by eight men through fair tribute ground, which is being taken as we make space for the tributers. The lode in the stope at back of the 45, west of Parry's is 2 feet wide, producing moderate work for the stamps. The drivage of the 35 west, on South Beam lode, progresses very favourably through easy and very congenial ground; the lode here is 2 feet wide, and producing saving work. The stope in the back of this level is yielding fair work for the stamps, and presents an improving appearance. The stope in the back of the 78, west of engine-shaft, is being worken by four men, and producing work of a high quality. We have this week set a new stope in back of the 55, west of Parry's shaft; lode 1½ wide, yielding work of an average quality. Our tribute department presents a very cheering appearance, and consists of nine pitches, working by 30 men, at an average tribute of 9s. 4d. in 1*l.* We are busily preparing another batch of tin, which we intend selling a fortnight hence. Our steam-stamps, which will facilitate the returns, are arriving at a state of completion. I must repeat my satisfaction with the capabilities of the mine, and my conviction that extention of development only, especially in depth, is necessary to increase them to a highly profitable state.

WEST CONDURROW.—F. Gilbert, May 21: The lode at the engine-shaft is 2 feet wide, composed of spar and peach, with a kindly appearance. In the 50, driving west of the above shaft, the lode is 2½ feet wide, a strong masterly lode, and worth for tin 12*l.* per fm.; this level is extended 12 fathoms west of the engine-shaft, and standing in whole ground from the 24. In the 36, driving east of Purser's shaft, the lode in the present end is small, being disordered by the granite, and the ground more spare for driving. The lode in the winze sinking below the 24 is 6 in. wide, composed principally of a very kindly spar; the stope in back of this level is worth for tin 8*l.* per fm. The lode in the deep adit level, driving west of Bennett's shaft, is 2 ft. wide, composed of capel. The driving of the 12, north on the cross-course, and the sinking of Bennett's shaft, are progressing very satisfactorily. Nothing new in the cross-cut.

WEST DEVON.—E. James, May 21: The tributers are working in the eastern end of the winze, down about 4 fms. below the bottom of the 40; the lode at this point is 3 ft. wide, producing good stones of yellow copper ore—a very kindly lode. The engine and pitwork are in good working order.

WEST PAR CONSOLS.—W. Woolcock, May 21: The lode in Dawkes's shaft, sinking below the 65, is divided by a horse of killas, the north part of which is 1½ foot wide, producing tin; the south part is 6 in. wide, also producing tin, but not sufficient to value. Taking the underlie of these parts or branches, I think they are likely to come together in 6 or 8 feet sinking, where I anticipate a larger lode. About 3 fms. east, where the branches come together, the lode is from 5 to 6 ft. wide, having yielded a large quantity of tinstuff; the backs have been worked through to the 55. The lode in the 65, east of same shaft, is not so large as when last reported, being 1½ ft. wide, of a very promising character, producing good stones of tin, and looking kindly for an early improvement. The lode in the 30 end west is 3 feet wide, composed of peach and spar, chiefly of the former, producing good saving work for tin; this is also a very promising point.

WEST SHARP TOR.—Wm. Richards, May 18: As the ground in the 162 east continues to be mixed up with capel, and, consequently, slow for progress, I have put the men to drive entirely on the lode, which for the width carried contains blue capel, quartz, iron, mundic, and a little grey copper ore. The part of lode carried in the 162 west is composed of capel, quartz, iron, prian, mundic, and some rich quality copper ore; water issues very strongly from this point. The ground in the adit level is very good, progressing about 3 fms. per week.

WEST WHEAL JANE.—J. Tonkin, J. Smith, May 16: Our surface works are going forward very satisfactorily. The steam whim-engine will be ready to work by our next setting-day, and the house of our pumping-engine will be up about that time. We have about 10 fms. more to cut down in the shaft over the shallow adit, and about 8 fms. more to cut below the 10; the whole of this work will be completed in about a month from this time. The value of our tinstuff sampled last week is about 225*l.*; and we have offered it for this sum to the tin buyers; they will probably accept it. When our erections are complete we shall be in an excellent position for working the mine to the best advantage.

WEST WHEAL TOLGUS.—Taylor's sumpmen are getting on pretty well in sinking Taylor's engine-shaft below the 52. The lode in the winze sinking below the 33, east of Taylor's, is 4 ft. wide, yielding 4 tons of ore per fm.; winze down 9 fms. In the 68, west of Wheal Raven east shaft, the lode is 2½ ft. wide, producing 3 tons of ore per fm. The ground in the 50 cross-cut north is moderately easy.

WEST WHEAL TREVELYAN.—John Harris, May 16: The men are making good progress with the sinking of Charles's shaft below the 58; the lode is 16 inches wide, of quartz, prian, and iron, with good ore—a very promising lode. The lode in the 58 west is full 2 ft. wide, 8 in. of which is producing good ore, worth 1 ton per fm. The lode in the stope above the 58 west is worth about 4*l.* per fm. The stope below the 48, east of Charles's shaft, is worth 4*l.* per fm. We have suspended the sinking of the winze below the 48, and placed the men to rise against it to facilitate the boring, which will lay open some orey ground.

WHEAL AGAR.—W. Roberts, May 20: In the 100, east of the cross-cut, the lode is 2 ft. wide, producing saving work for tin, and also producing stones of good ore; in the same level west the lode is 4 ft. wide, producing stones of copper ore and tinstuff—all saving work. In the 90 west the lode is 1½ ft. wide, with stones of ore. In the 80 east the lode is 2 ft. wide, very promising, and producing stones of ore. At the western engine-shaft the cross-cuts at the 90 are progressing satisfactorily.

WHEAL ARTHUR.—T. Carpenter, May 21: Old Lode: The lode in the 60 west below adit is 4 feet wide, composed of spar, capel, mundic, and good stones of copper ore; and the ground appears to be more favourable for progress than it has for some weeks past. The lode in Hill's stope, in bottom of the 50 west, is 4 feet wide, worth 10*l.* per fathom.—Edward Lode: The lode in Prout's rise and stope, in back of the 50 east, is 4 feet wide, composed of spar, mundic, and copper ore, worth of the latter 12*l.* per fathom. The ore ground appears to be lengthening east from cross-course, where we intend to drive in that direction shortly. We shall sample on the 29th inst. about 80 tons of copper ore.

WHEAL CREBOR.—J. Gifford, May 10: In the 85 west the lode is 5 ft. wide, yielding from 3 to 4 tons of copper ore, worth 15*l.* per fm. In the 84 east the lode is 5 feet wide, yielding from 7 to 8 tons, worth from 35*l.* to 40*l.* per fm. In the 72 east the lode is 2½ ft. wide, yielding 3 tons of ore per fm., worth 12*l.* per fm.; and, from present appearance, will further improve. About 50 fms. in advance of this end there is a cross-course seen in the adit level, about 1¼ ft. wide, underlying 2 ft. per fm.; and where, taking the western cross-course in the old mine for our guide, we may reasonably expect to find a good deposit of copper ore near and about the one named above, more especially as we now have a good lode in the 72 fm. level end going east. No alteration in the tribute department.

WHEAL DAMSEL.—R. Pryor, sen., H. Harvey, May 15: We have set the following bargains to-day:—Dunsterville's shaft to sink below the 40, by nine men, at 11*l.* 10s. per fathom; we are shortly expecting to communicate this shaft to the rise in back of the deep adit level. The 50 cross-cut to drive south of Turtle's lode, by six men, at 3*l.* per fathom; we have met with an increased quantity of water in this cross-cut, as if nearing the lode. The 40 cross-cut to drive north of King's shaft, by four men, at 1*l.* 5s. per fathom; should the ground continue as favourable as it is at present we shall intersect the copper lode in about six weeks from this time. All other places are much the same as for some time past.

WHEAL EDWARD.—G. Rowe, May 16: There is no change in the appearance of the lode at the engine-shaft sinking below the 92; it still contains spots of ore, and is looking kindly. The lode in the 92 is small, being near the caunter lode. The lode in the 81 west is 2½ feet wide, worth 10*l.* per fm.; the lode in the stopes in back of this level is worth from 3 to 4 tons of ore per fm. The lode in the winze sinking below the 71 west is worth 3 tons of ore per fathom. There is no change to notice in the cross-cut driving south in the 61 west; the stopes in back of this level are worth from 15*l.* to 20*l.* per fm. We have resumed the driving of the 50 west, but the ore part of the lode is not taken down.—New South Lode: The 50, east from Bray's cross-cut, is still in a good course of ore, worth from 20*l.* to 25*l.* per fm.; the lode in the rise in back of this level is worth 40*l.* per fm.; the lode in the same level west is showing indications of improvement. No other change.

WHEAL GRYLLS.—E. Rogers, J. Pope, May 21: Fisher's Shaft: At Annie's engine-shaft we have fixed a 10-inch plunger at the 30 fm. level, which has enabled us to remove the two drawing-lifts and disenage the flat-rods. The shaftmen have just commenced sinking, but no lode has been taken down since last reported on. In the 30 end, driving east of the flat-rod shaft, the lode is worth 5*l.* per fm.; in the rise in the back of the 30 fm. level the lode is worth 3*l.* per fm.; in the winze in the bottom of the 19 fm. level the lode is also worth 3*l.* per fm.—Georgia Lode: The engine-shaft is down 8 fms. 3 ft. 6 in. below the 10 fm. level; the lode is 3 feet wide, unproductive. At the 10 fm. level there is no alteration; the lode is small and poor. In the two stopes in the back of this level there has been no lode broken during the past week; in the back of the 33 fm. No. 1 stope is worth 14*l.* per fm., and No. 2, 10*l.* per fm. We sold on Saturday, the 16th inst., 20 tons 19 cwts. 3 qrs. 3 lbs. of black tin at 67*l.* 10s. per ton, amounting to 1415*l.* 1s. 1d.

WHEAL HARRIETT.—S. Williams, May 16: The lode in the engine-shaft and 150 east end is small and unproductive. In the 115 north cross-cut we have cut a small branch, and from appearance we are getting near the lode; there has been nothing done in the winze below the 115 for the week. The lode in the stope below the 100, west from east winze, is worth 100*l.* per fm. The lode in the stope east from west winze is worth 20*l.* per fm.—Alexander's Shaft: This shaft is now to its full size from surface to bottom; next week we shall fix the lift, and commence sinking below the 12. The lode in the 12 east end is producing stones of ore. The lode in the adit east end is poor. The stopes above and below the adit level are worth about 8*l.* per fm.

WHEAL HOPE.—Wm. H. Reynolds, May 19: We are now putting down pitwork that reaches to the 58, and hope to get into that level by the end of the week. According to the book containing the reports written during the former working, 24 years ago, there is a good lode in the western end of this level; it is said to be driven to the boundary, but as we have an additional sett west of the old mine, we shall have a long run on the course of the lodes. We expect to set some pitches at moderate tributes in this level.

WHEAL KITTY (St. Agnes).—R. Pryor, sen., S. Davey, May 16: Engine-shaft: We have not as yet cut the lode in the 100 cross-cut south, but the ground continues much the same for driving. The lode in the 90, east of shaft, is worth 5*l.* per fm.—Holgate's Shaft: The caunter lode, in the 65 cross-cut south, is at this time disordered, and not to value. We are cutting in on the eastern side of the level, believing there is more of the lode standing in that direction.—Pryor's Lode: The lode in the 54, east of cross-cut, is 4 feet wide, worth full 15*l.* per fm., with a good appearance: in this level, west of cross-cut, the lode is 3 ft. wide, worth 12*l.* per fm. The lode in the rise in back of this, about 4 fms. behind the end, is 4 feet wide, worth 12*l.* per fm. The lode in the 44, east of cross-cut, is 2½ ft. wide, worth 12*l.* per fm.; and in this level, west of ditto, 3 ft. wide, worth 12*l.* per fm. We are still driving a cross-cut south in the 54, to cut the lode east of slide, the ground being favourable for driving; the lode in this level, west of cross-cut, is 3 ft. wide, but not quite so good as when last reported, being disordered by a gossan; now worth 8*l.* per fm. In the rise behind this end the lode is 18 in. wide, worth 11*l.* per fathom. The ground in the 24 cross-cut continues to be much the same. Twelve men are pushing on with the cutting down of the new shaft, and we hope the ground is getting a little more favourable. Our pay and setting went off well.

WHEAL MARGERY.—R. James, W. Rogers, May 21: In the 122, east of American shaft, the lode is rather improved, worth 5*l.* per fm. In the 122 west the lode is producing stones of copper ore. No change in the 110 east. In No. 1 winze, in bottom of the 110 east, the lode is worth 8*l.* per fm. In the 110 west the lode is still large; in the upper part of the end it is divided by a horse of killas, and worth 20*l.* per fm., but in the bottom it is worth 30*l.* per fm., and of good appearance. The winze in bottom of the 100 west is holed to the 110. All other part are without alteration since last report.

WHEAL MARY ANN.—P. Clymo, H. Hodge, J. Harris, J. Stevens, May 2: Clymo's shaft is sunk 4½ fathoms under the 180; the cross-cut at this level is extended east 9¼ fathoms towards the lode. In the 170, south of Clymo's shaft, the lode is 2¼ feet wide, worth 8*l.* per fm.; in the 170, north of Pollard's shaft, it is 3 ft. wide, worth 8*l.* per fm. There is nothing new to notice in the 160 north. The stopes and pitches are producing much as usual. We sold, on the 19th inst., two parcels of lead ores, No. 1, computed 47 tons, to Messrs. J. and J. Williams and Stock and Co., at 25*l.* per ton; and No. 2, computed 26 tons, to Messrs. J. and J. Williams, at 13*l.* 5s. per ton.

WHEAL NORRIS.—W. Bugelhole, J. Andrews, May 16: The ground at Cremorne engine-shaft is easy for sinking, and the men are making good progress; the lode in this shaft is 6 ft. wide, composed of granite, peach, prian, iron, and moderate stamping work for tin. The lode in the 45 east is 6 in. wide, a little tin in it, but not sufficient to value. In the 35 end, driving east of the above shaft, on No. 5 lode, we are carrying the north part of the lode; this part is composed of spar, prian, a little iron and tin intermixed with it; after washing it will yield good stamping work. The ground in the 15 cross-cut south is spare for driving. The ground in Carter's shaft is hard for sinking. The lode in the 25, east of said shaft, on No. 4 lode, is a little harder for driving; the lode is 4 ft. wide, composed of peach, prian, beautiful congenial spar, and tin, worth 14*l.* per fm. We are driving on the north side of No. 3 lode in the 15, east of said shaft; the lode is worth 7*l.* per fm. We have set a tribute pitch in back of the 25 fm. level, 5 fms. east and 5 fms. west of the winze, to four

made, and in the course of two or three days we shall commence stoping the backs of the 50 east, and in a large promising lode, worth from 15*l.* to 20*l.* per fm. All other operations are going on well, and we have a full supply of water for the stamps.

YARNER.—R. Barkell, May 20: The ground in the engine-shaft is without change since last report; we are pushing on this shaft as fast as possible. The 40 west is producing stones of ore, but not enough to value: the same remark will apply to the 40 east. The stope west of shaft in back of the 40 will yield 3 tons per fm. The eastern stope in back of same level is improved, now worth 2½ tons per fm.; this appears to be a continuation of the shoot of ore seen in the 30, east of shaft, I have no doubt but that it will lead to good results.

THE HAVAN AND HENFWLCH UNITED SILVER-LEAD MINES, CARDIGANSHIRE.—An influential company has just been successfully formed to work these celebrated old mines, and promises speedily to become as successful as any in Cardiganshire. One of the mines, and that from little more than surface working, produced a large part of the wealth of Sir Hugh Myddleton, the designer and constructor of the New River; and, again, some years ago, Mr. Sheldon, the then proprietor, raised, before his death, 20,000*l.* worth of ore from a very small section of ground. The company now formed is commencing active operations in opening out the old workings and developing new ones, and already it is reported that extensive courses of ore, sufficient to make very large immediate profits, are available, with the apparent certainty of great increase. Ample machinery is delivered on the mine, and will be at work before long. It may be interesting to note that this company is to be worked under nearly the same directors as the Silver Mountain Company, in the same neighbourhood, formed in August last, which has now laid open a very rich and valuable mine, and there appears every certainty that as great, or greater, success will attend the Havan and Henfwich Mines. The capital is in 5000 shares, of 5*l.* each, which have already been dealt in at a high premium, and it appears that the list of applications closes almost immediately.

WHEAL ROSE AND GREAT NORTH DOWNS MINES continue to create considerable excitement in the neighbourhood of Chacewater and Redruth. The discovery of a rich course of ore 50 fms. long in Wheal Rose, and up to the Great North Downs, has caused a great demand for shares in the last-named mine, River or boundary shaft in Great North Downs being within 4 fathoms of Wheal Rose boundary, and cleared within a few feet of the rich discovery. When Messrs. Williams and Co. worked this mine (then under the name of North Downs) they divided upwards of 100,000*l.* profit. The sett contains eleven known lodes for tin and copper, the deepest level being only 60 fms.—that on the rich productive New Brigan lode, which they are now draining by means of flat-rods from the pumping-engine, and of which they have drained and cleared 56 fms. Capt. Trelease, the manager, anticipates having the 60 unwatered in five weeks. If the setting and bargain books of the mine at the last working can be believed, the course of ore left in the bottom of the level can be worked by the present adventurers at 2s. 6d. in 1*l.* This valuable run of mineral ground is well deserving the attention of mining investors, who should lose no time in sending an agent to inspect the property, and by the manager every information will be given. In all my mining experience I have never seen in any mining sett in Cornwall so many masterly lodes, cross-courses, &c., as in this sett; and I believe, by good management, Great North Downs in a few years will divide profits to a greater extent than under the last management.

THE DISCOVERER OF THALLIUM.—It appears that there are some grounds for doubting whether either Mr. Crookes or the French chemist for whom the merit has been claimed are entitled to the honour of having first discovered the metal thallium, for so long since as July 18, 1857, a notice was published in the *Mining Journal* stating that Mr. Joseph Jones, of Bolton-le-Moors, claimed to have discovered a metal which it now appears was thallium, although by Mr. Jones it was designated sulphurium. That Mr. Joseph Jones really succeeded in isolating the metal is beyond doubt, for he stated that it was "of the same class as arsenium, silver, aluminium," &c. Mr. Jones also stated that this new metal was obtained from sulphur residue. The inventor being a poor man, had little opportunity of making his discovery known, but that he is really entitled to the honour of being the first discoverer of thallium there seems no doubt.

MANUFACTURE OF ZINC.—Mr. Samuel Healey, of Elizabeth-street, Hackney-road, applied, and was refused provisional protection for an invention, which consists in constructing the furnaces employed in the melting and the annealing of zinc in close proximity to each other, so that the process of annealing may be effected by means of the waste heat escaping from the melting-furnace. The melting-furnace is constructed on the reverberatory principle, and is so arranged that the contents when melted may be tapped or drawn off into moulds, which moulds are carried along under the tap-hole to receive the desired quantity of metal, and then they travel on to what is known as the breaking-down roliers. The moulds are so constructed that so soon as they receive the required quantity of metal from the furnace they will tilt or balance, and thereby indicate that the requisite or desired amount of metal has been received. The breaking down, moulding, and finishing are performed by rolling both ways, and gradually decreasing the space in such a manner as not to harden or split the metal.

TREATMENT OF ORES.—In reference to the crushing of ores, the improvements provisionally specified by Mr. C. de Bergue, of Manchester, embrace apparatus for employing direct pressure of steam or air to the stampers of stamping-mills, so as to increase the force of a blow, and also to reduce or regulate it as desired, and for concentrating or collecting, and presenting the materials to the proper action of the stampers. In crushing between rolls, he causes the surface of one roll to differ from that of the other in the speed of revolution. He proposes to separate minerals according to gravity, by dropping them into a vessel of water.

Mr. ROBERT ARMSTRONG, C.E., the author of a "Treatise on Steam-Boilers," and other works and contributions to engineering literature, has, we regret to learn, in consequence of accidents which he met some months since, and also recently, which induced lameness and general debility, been incapacitated from following his usual avocations, and is thereby placed in circumstances of difficulty and distress. It has, in consequence, been resolved by a few of Mr. Armstrong's friends to endeavour to extricate him from his painful position, and to assist him, at his advanced age (69 years), by raising a small fund for the purpose of placing him in some line of business, or otherwise, by which he may obtain a livelihood. With this view they solicit co-operation by contributions and suggestions as to the course to be pursued, and earnestly invite aid in the promotion of the object in view. The subscription list has been headed by Messrs. John Penn and Son, James Watt and Co., W. Langdon, Benjamin Fothergill, G. Forrester and Co., and several firms and gentlemen.

MANCHESTER GEOLOGICAL SOCIETY.—The monthly meeting of members was held on Tuesday in the Museum, Peter-street; the President, Mr. J. Dickinson, F.G.S., in the chair. A paper was read by Mr. Binney On the Geological Formation of the Site occupied by Manchester; and some shells were presented by Mr. Brammall from the drift at Rainford. A discussion also took place as to the relative merits of the various Safety-Lamps now in use, the general opinion being that the Stephenson and Muesseler lamps were more valuable than the Davy, as the former were extinguished by fire-damp, while the latter would explode.

THE INVENTORS' INSTITUTE.—The first annual general meeting of this society took place on Thursday, May 14, at 9, Conduit-street, Regent-street. The meeting was numerously attended. Amongst those present were—General Sir John Scott Lillie, C.B., Admiral Sir E. Belcher, C.B., Mr. F. B. Beamish, M.P., Sir Patrick O'Brien, M.P., Dr. Normandy, Captain Selwyn, R.N., Capt. Rogers, R.N., Mr. Robert Richardson, C.E., Mr. Benjamin Burleigh, Mr. C. Varley, &c. General Sir John Scott Lillie, C.B., occupied the chair. The report of the council was read by the honorary secretary, who also read the audited statement of accounts, from which it appeared that after defraying the expenses of the past year, and also those incidental to the formation of the Institute, there remained a balance in favour of the Institute of upwards of 90*l.* The report and accounts were adopted, and the Council re-elected for the ensuing year. After the proceedings of the general meeting had terminated several of the members adjourned to St. James's Hall to partake of the first Anniversary Dinner of the Institute. The Earl of Caithness, a vice-president, was unavoidably prevented from occupying the chair, but his place was ably filled by Lord Richard Grosvenor, M.P., also a vice-president. About 70 gentlemen were present at the dinner, after which the several toasts were replied to by the following gentlemen:—General Sir John Scott Lillie, C.B., Capt. Rogers, R.N., Mr. Wm. Henry Barlow, C.E., F.R.S., Mr. Hume Williams, Mr. P. R. Hodge, Sir Patrick O'Brien, M.P., Mr. T. Webster, F.R.S., Mr. R. Richardson, C.E., &c.

The Hafod Hotel Company have allotted the shares of the enlarged capital, for the erection of the Queen's Hotel, Aberystwith. The directors have commenced the building on its freehold site, on the Marine Terrace, which site has been considerably improved, as to the sea frontage of the hotel, by a permissive grant, free from the Corporation of Aberystwith, of a few extra feet of ground, and the right to put out the Terrace wall in a corresponding line. The basement will be put in and brought to a level with the Terrace by July 1, on which day it is proposed by public ceremony to lay the first stone at that level.

ROTARY ENGINES, ROTARY PUMPS, and ROTARY BLOWING-MACHINES—Messrs. Davis's invention consists—1. In guiding the sliding pistons by means of projections on their inner ends engaging in grooves in the end plates of the fixed cylinder, against the inner sides of which grooves the same projections bear. As the small cylinder rotates, the sliding pistons are pressed outwards, and made to bear accurately against the fixed cylinder by the inner sides of the grooves acting on the projections on the inner ends of the sliding pistons. The inner or guiding surfaces of the said grooves are nearly, but not quite, circular, being of greatest radius in a plane parallel to that of the spring bearing. Instead of the grooves described, fixed irregular cams on the plates closing the fixed cylinder may be used with like effect.—2. The invention consists in the employment of a self-adjusting packing on that edge of each sliding piston which bears against the fixed cylinder.

THAMES TUNNEL COMPANY.—Receipts for the week ending May 16, 53*l.* 10s. 8d.; number of passengers, 12,608.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending May 17 was 11,241*l.* 16s. 2d.

THE LAW OF MINES.—The new work on the Law of Mines, by Mr. Whitton Arundell, the only cheap book in which the entire subject is completely and ably handled, and no work can be more profitably studied, after the company is formed, than this. The law of mines is in this work treated quite irrespective of the law of mining companies, which are entirely governed by the new Joint Stock Companies Act of 1862. Mr. Arundell's work will be forwarded from our office on receipt of a Post-office order for 4s.

"CORNISH NOTES."—The first edition of the "Notes made during a recent Tour in Cornwall and Devon," by Mr. J. Y. Watson, F.G.S., having been sold, a second edition, revised by the Author, has been printed and copies, 1s. each, can be had of Messrs. Watson and Cuell, St. Michael's alley, Cornhill, or at the *Mining Journal* office, 26, Fleet-street, London.

*** With the Journal of last week we gave a SUPPLEMENTAL SHEET, which contains—Money Making—No. III.; Foreign Mining and, Metallurgy; Mineral Industry of Prussia; Meetings of the National Provincial Bank of England; the Devonshire Great Consolidated Mining Company; the Holmbush, South Condurrow, Bryn Gwiog, Long Rake Mining Companies, and Chesterfield and Midland Silkstone Colliery Company; Mining in Ireland—Geological Ordnance Map Literary Notice; Mosheimer's Patent Stamps, Gold and Silver Amalgamating Machines, and other Illustrated announcements.

*** With the Journal of April 25 we published a SUPPLEMENTAL SHEET, which contains a detailed report of the Accident at the Botallack Mine—on Money Making—Foreign Mining and Metallurgy—Meetings of the East Carn Brea, North Downs, Lady Bertha, and Great Barrier Mining Companies—Explosive Gases in Collieries—The Dyas, or Permian, Formation in England—Lighthouse Illumination—Manufacture of Copper Tube—New Boring Machine—Improvements in Railway Crossings—Trial of a Traction-Engine—Gigantic Iron Casting—Prices of Materials, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, May 22, 1863.

COPPER.	£	s.	d.	
Best selected....p. ton	92	0	0-	—
Tough cake..... „	89	0	0-	—
Tile ..... „	89	0	0-	—
Burra Burra .... „	94	10	0-	—
Copper wire .....p. lb.	0	1	0¼	—
ditto tubes ..... „	0	1	0-	—
Sheathing & bolts p. ton	96	0	0-	—
Bottoms ..... „	101	0	0-	—
Old (Exchange) .... „	82	0	0-	—

IRON.	Per Ton.			
Bars, Welsh, in London..	6	5	0-	—
Ditto, to arrive	6	0	0-	6 2 6
Nail rods	7	0	0-	—
„ Stafford. in London	7	10	0-	—
Bars ditto	7	5	0-	8 0 0
Hoops ditto	8	7	6-	8 10 0
Sheets, single	9	5	0-	9 15 0
Pig, No. 1, in Wales ..	3	10	0-	4 0 0
Refined metal, ditto....	4	0	0-	5 0 0
Bars, common, ditto....	5	7	6-	5 10 0
Ditto, merchant, in Tees	6	10	0-	—
Ditto, railway, in Wales	5	5	0-	5 7 6
Ditto, Swed. in London.	11	10	0-	12 10 0
To arrive	11	10	0-	12 10 0
Pig, No. 1, in Clyde....	2	14	6-	3 0 0
Ditto, f.o.b. in Tees ..	2	8	0-	2 10 0
Ditto, forge, f.o.b. in Tees	2	5	0-	—
Staffordshire Forge Pig.		—	-	-

LEAD.				
English Pig, ordny. soft	20	15	0-	21 10 0
Ditto (WB)	23	0	0-	—
Ditto sheet	21	5	0-	—
Ditto red lead	21	10	0-	21 15 0
Ditto white	26	0	0-	27 0 0
Ditto patent shot.....	23	0	0-	23 10 0
Spanish	19	15	0-	—

BRASS.	Per. lb.
Sheets	8¾d.-9¼d.
Wire	8¾d.- 9d.
Tubes	10½d.-11¾d.

FOREIGN STEEL.	Per Ton.			
Swedish, in kegs (rolled)	15	10	0-	—
„ (hammered).	15	10	0-18	0 0
Ditto, in faggots.....	17	0	0-18	0 0
English, Spring	18	0	0-23	0 0
Bessemer's, Engineers Tool	44	0	0-	—
„ Spindle	30	0	0-	—
QUICKSILVER	7	0	0	p. bottle

SPELTER.	Per Ton.			
Foreign	17	15	0-18	0 0
To arrive	18	0	0-	—

ZINC.				
In sheets	23	0	0-	—

TIN.				
English, blocks 119	0	0-	—	
Ditto, Bars (in barrels)..120	0	0-	—	
Ditto, Refined 124	0	0-	—	
Banca 128	10	0-129	0 0	
Straits 125	0	0-126	0 0	

TIN-PLATES.*				
IC Charcoal, 1st qua. p. bx.	1	7	6-	1 8 6
IX Ditto 1st quality „	1	13	6-	1 14 6
IC Ditto 2d quality „	1	4	6-	1 10
IX Ditto 2d quality „	1	10	6-	1 12 0
IC Coke ..... „	1	2	6-	1 4 0
IX Ditto..... „	1	8	6-	1 10 0
Canada plates ....p. ton	12	10	0-13	0 0

In London; 20s. less at the works.

Yellow Metal Sheathing .p. lb.	8¼d.-
Sheets .....p. lb.	7¾d.-
Indian Charcoal Pigs in London	6 12 6- 6 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—During the past week the tone of the Metal Market has continued tolerably steady. In some metals a good business has been done, but for the most part buyers are very backward, and holders wishing to realise are almost invariably obliged to make some slight concessions in price. The demand for home consumption is scarcely equal to the average.

COPPER.—In English, manufactured descriptions are quiet, at fixed rates; cake, tile, and ingot offering slightly under sales, about 87*l.* 10s. to 88*l.* There is but a dull market for foreign; prices are, however, unchanged. Burra Burra, 94*l.* 10s.; Kapunda, 95*l.*; Chili slab, 83*l.*

YELLOW METAL.—This article steadily increases in demand, and sellers are now very firm, at former quotations—7¼d. to 7¾d. per lb. for brazery sheat, and 8¼d. sheathing.

IRON.—Railway bars very slow of sale, at 5*l.* 5s., f.o.b. in Wales; merchant bars rather more enquired for, and stiffer in price; 5*l.* 7s. 6d. at works; 6*l.* 2s. 6d., f.o.b. in London. Ironmasters are generally short of orders. Staffordshire remains without alteration, in steady request at list prices. Swedish bars arrive but slowly, and though holders hold out for high rates, and seem to have a good opinion of the market, buyers are very difficult to find even for the few parcels coming in from day to day. Scotch pigs have advanced during the weak about 6d. per ton; market is easier again to-day, closing, mixed numbers, 50s. 6d., cash.

SPELTER.—This metal is much neglected. Cash buyers very scarce; sellers about 17*l.* 15s., but no sales of importance reported.

LEAD.—In English pig there is considerable activity; a large quantity having been sold during the latter part of last week, and throughout the present, mostly for shipment. Ordinary soft quality very firm at 20*l.* 15s., with an upward tendency; WB steady at 23*l.*, only in limited demand.

TIN.—English rather better; sellers adhere more firmly to fixed rates. In foreign there is more doing. Sales of Straits are reported at 126*l.*, three months prompt, and 125*l.* cash; but at these prices there are only a few sellers. Banca, 128*l.* 10s. to 129*l.*; quotations advanced in Holland to 79 fls.

TIN-PLATES steady at quoted rates; manufacturers fairly off for orders.

STEEL.—A few sales made at about 15*l.* 10s. in Swedish keg; market still dull.

The rate of interest has again been raised, and now stands at 4 per cent. This act on the part of the Bank, so soon after raising it last Saturday to 3½, has caused some little surprise in the City, but we apprehend the measure was necessary, on account of the increased demand for money, and also to check the extraordinary increase in new companies, for, so long as the public will subscribe for shares (too often allured by fictitious premiums), there will be plenty of "promoters" to keep up the supply in "banks," "hotels," and "Credit Mobiliers."

In the MINING SHARE MARKET dulness continues to reign, and although the standard for ore is a little better this week, the low price of copper checks investment in copper mines; and the speculative business is principally confined to one or two mines, to the exclusion of others. East Caradon shares have been very flat, and though in the early part of the week they were 36, buyers, they afterwards receded to 31, then rose on Thursday to 32½; on Friday they opened at 32, buyers, and closed 31½ to 32¼; it appears the shaft of the fly-wheel of the drawing-engine broke a few days ago, and may delay drawing stuff for a short time; but the main cause of the decline in shares was owing to the decreased value of the ends, made known by private inspections on Wednesday, and the anticipation that the sale of ore on Thursday would be under 2000*l.* (it realised over 2100*l.*) The latest official report values the 50 east on the caunter lode at 12*l.* per fm.; the 60 east, 30*l.* to 35*l.* per fm.; the 70 east, 25*l.* per fm.; the 70 west, 40*l.* per fm. The fall in this mine, within a few months, has been the extraordinary one of nearly 150,000*l.*, and upon any improvement in the levels there will, doubtless, be some anxiety and rush to buy back again by those who have sold in anticipation of this fall, and a reaction may suddenly occur. East Basset shares opened on Monday 97½ to 100, and improved during the week to 106, leaving off 102½ to 107½. East Carn Brea shares have declined to 7½, 7¾. Grambler and St. Aubyn, 10 to 11; Great South Tolgus, 5 to 5½; Great Wheal Fortune, 35 to 36. Hingston Down shares have been firmer, and more in request, but leave off 2¾ to 3½. Stray Park shares are firmer, and in demand at 38 to 40; the agents have issued their two-monthly report, which states the shaft is down 2 fathoms below the 215 fathom level, and the last fathom has been in granite; and at the next level the lode will most likely be fully in the granite, and become more productive. Camborne Vean, 2 to 2¼; Clifford Amalgamated, 21½ to 22½. Condurrow shares are flatter, at 100 to 110; Cook's Kitchen, 26 to 27. Copper Hill shares not quite so firm, at 82 to 84; Drake Walls, 2 to 2½. Cargoll, 40 to 41; a dividend of 1*l.* 5s. per share was declared at the meeting, leaving 1002*l.* 10s. 9d. to credit of next account. The report of the mine is favourable, and shows good points to come off. The lode in the engine-shaft is worth 2 tons of lead ore per fathom. Illogan Consols, 30s. to 32s. 6d.; Marke Valley, 6½ to 7; North Basset, 4 to 4½; North Crofty, 4½ to 4¾; North Dolcoath, 1¾ to 2; North Downs, 2 to 2¼; North Robert, 14s. to 16s.

Wheal Grenville, 5½ to 5¾, and in demand; at the meeting the accounts showed liabilities over assets of 119*l.* 12s. 11d., and no call was made. During the quarter the ores sold were 1296*l.* 12s. 11d.; tin, 331*l.*=1628*l.* 1s., and the agent expects to sell at least the same quantity for the next quarter. The report shows several favourable points to come off before the next meeting. And in reference to the tin lode intersected last week it appears to be an entirely new lode, and the agents write that in the 100 it is producing some splendid work for tin; and it has also been cut into in the 90 west, and some good work for tin also broken. A telegram received at the office since this was written values the 90, just cut, at 15*l.* per fm., and the 100 at 12*l.* per fm. Wheal Crebor shares have been very largely dealt in, and owing to "buying in" against the "bears," and a large amount of speculative business besides, the piece has been rather fluctuating. On Monday it was 3½ to 3¾; Tuesday, about the same; Wednesday, 3 to 3¾; Thursday, fluctuating from 3¼ to 3½; Friday, opened at and left off 3¼ to 3½; the ore (82 tons) sold at about 3*l.* 14s. per ton, with carriage. North Roskear, 28 to 30. Wheal Buller, 50 to 55; at the meeting the accounts showed a loss of 125*l.* 17s. 5d. on the two months, and a balance in favour of the adventurers of 304*l.* 0s. 8d. The copper ores sold realised 557*l.* 4s. 1d.; tin, 1239*l.* 6s. 7d.; and for the latter metal the mine looks well at the shallower levels. Pendeen, 7 to 7½; there is very little alteration in the mine. Providence Mines, 41 to 42; Rosewarne United, 1¾ to 1⅞; Roskearnowth, 8 to 8¼. Sithney Carnmeal shares have advanced to 5, 5¼; at the meeting a call of 10s. per share was made. In Bounder's shaft, which has now been sunk to the 62, the lode is 4 to 5 ft. wide, worth 14*l.* per fm., and as this is the rich Carnmeal lode of Great Wheal Fortune, great things are expected from it as the shaft gets deeper. Wheal Unity shares have been very largely dealt in, and leave off 11s. to 12s.; call paid; at the meeting the accounts showed 1329*l.* 15s. 2d. against this mine, and a call of 4s. per share was made. In about a month the lode will be reached in the 40, at the new shaft, and the prospects good for ore. South Caradon, 400 to 410. South Caradon Wheal Hooper, 15s. to 16s.; the cross-cut towards the lode is in granite, and easier. South Frances, 80 to 85; South Tolgus, 47¼ to 50; we understand a dividend of 1*l.* per share will be declared at the meeting. Sortridge Consols, 8s. to 10s.; in the 40, west of Gilbert's cross-cut, No. 1 tin lode is worth 15*l.* per fm. Bottle Hill shares, although largely dealt in, have not been quite so firm, and leave off 10s. to 12s.; the new south lode is not so productive for tin, but looking better for copper. Tincroft, 19½ to 19¾; West Caradon, 26 to 28. West Frances shares have advanced to 20, 22, and in demand. West Seton, 240 to 250; West Tolgus, 64; Wheal Basset and Grylls, 26 to 27; Wheal Edward, 3 to 3½; the lode in the 81 west is worth 10*l.* per fm.; the back of the level, 20*l.* per fm.; the lode in the 71 winze, 15*l.* per fm.; the 80 east, on the new south lode, 25*l.* per fm.; the rise, 40*l.* per fm., and improving. Wheal Harriett shares have become firmer, at 3 to 3¼; the west stope is reported worth 100*l.* per fathom for length of stope (4 fathoms); east and west winze, 20*l.* per fm.; other parts of the mine are without change. Wheal Kitty (St. Agnes), 6¼ to 7¼; Pryor's lode, in the 54 east, 15*l.* per fm.; west, 12*l.* per fm.; and the rise, 12*l.* per fm.; the 44 east, 12*l.* per fm.; other parts are without change. At Kelly Bray, the lode has improved in the bottom of the 85 east, and worth 4 tons per fm.; the 35 backs, 20*l.* to 30*l.* per fm. East Rosewarne, 3¾ to 3⅞; in the sump-shaft the lode is worth 25*l.* per fm.; the sump winze, 25*l.* per fm.; the 55 west, 15*l.* per fm. Wheal Margaret, 30 to 31; Wheal Seton, 240 to 245. Nangiles, 12 to 14, and the mine improved. Great Caradon, 2 to 2¼. Wheal Emma, 1¼ to 1⅜; East Chiverton, 5 to 5¼; South Basset, 7 to 8. Devon Great Consols, 525 to 535; a dividend of 9216*l.*, or 9*l.* per share, has been declared, leaving 22,646*l.* 3s. 3d. ore bills and cash in hand.

On the Stock Exchange, a large amount of business has been transacted in Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—East Caradon, 36, 34¾, 35¼, 34¾, 34, 33, 32, 32¼, 31¼, 31⅜, 31, 32, 31⅛, 31¼; Hingston Down, 3, 2¾; Cambrian (Gold), ⅛, ⅜; Devon Great Consols, 522½, 520; North Wheal Basset, 4½; East Basset, 104, 105, 102; East Carn Brea, 8; South Caradon, 403¼; Clifford Amalgamated, 22; East Wheal Russell, 4. In Colonial Mining Shares the prices were:—Port Phillip, 1½, 1⅝, 1¾, 1½; Yudanamutana of South Australia, 3⅛, 3¼, 3⅛, 3⅜, 3¼, 3⅜, 3½; Cape Copper, 2⅜, 2⅞, 2⅜; Cobre Copper, 18⅛, 18½, 19¼; Dun Mountain Copper, ⅛, ⅜. In Foreign Mining Shares the prices were:—Alamillos, ⅝; Monte Aureos Brazilian Gold Mining Company, 2⅛, 2¼; St. John del Rey, 56, 55½, 56, 54⅜, 54¼, 53¾, 54¼, 53, 54; United Mexican, 6⅛, 6⅜, 6⅞, 6⅜, 6½; Vallanzasca (Gold), ⅛, ⅛, ⅜, ⅛, ⅜, ⅜, ⅜; East del Rey, 1⅛; Don Pedro North del Rey, 1⅛; Capula (Silver), ⅛; Mariquita, ⅜.

IRISH MINE SHARE MARKET.—Mining shares were comparatively neglected this week. Wicklow Copper shares, although they made a further advance before the close of the last week to 42*l.*, fell back to 40*l.* 10s. (5*l.* paid), being a reduction of 1*l.* on the last quotation. Mining Company of Ireland shares also experienced a reduction, and were dealt in at 19*l.* 7s. 6d. (7*l.* paid), being a fall of 5s. per share. Carysfort shares (fully paid-up) were not dealt in, but those of 20s. paid were firm, and commanded previous prices, of 21s. It appears that the "small parcels" of silver-lead ore sold from the Ballintemple Mine, referred to in our last Journal, amounted to 50 tons. That they reached this respectable quantity renders it only the more surprising that better efforts should not have been made to realise the best possible price by offering them to the usual competition. The reports from this mine continue favourable, and some points show an improvement. General Mining Company for Ireland shares were weak, and have been done at 4*l.* 5s. (4*l.* paid). Connorree shares were more in request, and several transactions took place at 18s. 6d. per share. A small number of Hibernian Mine shares realised 28*l.* each. Carbery (county Cork), and Castleward (county Down) remain without enquiry. At the general half-yearly meeting of the shareholders of the Wicklow Copper Mine Company (Limited) a dividend of 1*l.* per share was declared. As we gave an extract from the reports on the state of the affairs of this company, and of the prospects of their mines, in our last Journal, it is unnecessary to allude to them further. The meeting having been made special for the purpose of considering and approving the bill now before Parliament, entitled "an Act for the Amalgamation of the Hibernian Mine Company with the Wicklow Copper Mine Company (Limited), the solicitor of the company read the bill in question, after which—

"The Chairman said it appeared to him highly desirable that this Act should become the law of the land. The directors entered into that agreement, which, after being deliberately considered, was adopted, and signed by them. That agreement regulated the whole terms of the Act, and the terms on which it should be enacted. In point of fact, they had obtained the Act, as it passed through the House of Lords, securing to them the benefits they required. Of course they were anxious to maintain their own rules intact. Those rules were chiefly taken from the Clauses Consolidation Act, and the only condition imposed on them by Lord Shaftesbury was that, instead of maintaining their own rules, they should adopt those embodied in the Clauses Consolidation Act, giving them permission to enact and continue their present mode of transfer, which they had been allowed to do, so that they had maintained their present constitution intact in every respect. As to the benefits of the amalgamation, that was a very wide question. When they saw these two companies exist—one of which was, in point of fact, landlord of one place, and the other the tenant of another, for they were the landlords of one company, and the Hibernian Mine Company was tenant to them—such a state of things was highly objectionable, as jealousies and unpleasantness might arise between landlord and tenant, which this Act would put an end to, and give them a right to the property in fee. After a few remarks from Mr. O'Brien, the Act was unanimously approved and adopted, and complimentary votes to the Chairman, directors, and officers, were passed.

Capt. Paul, late of Knockmahon Mine, has recently inspected the Roaring Water Mine, and has made the following report upon that property:—

"Having visited Roaring Water, in company with Mr. T. C. Smith, I find that my previous good opinion of this highly-promising mine is now much strengthened by the present flattering appearance of the lodes in the places worked in the adit level since my last visit, but more particularly so on Grady's lode, on which the level has been extended east several fathoms on a very large and promising lode, composed of porphery, gossan, quartz, blue and green carbonates, and yielding beautiful stones of rich yellow copper ore, coated black, and is a really promising lode; at this point it is only 10 or 12 fathoms from surface, and underlying south about 2½ ft. per fathom. The Middle, Orchard, and Thomas's lodes are to the south, and underlying north, and the present drivages on them are all yielding beautiful stones of rich yellow and purple copper ore, and in a congenial stratum of clay-slate, at no great depth; with their present underlays, all of these lodes will be intersected by Grady's lode, and I have no doubt will yield an abundance of copper ore. A small pile of rich ore has been picked from the stuff coming from the different drivages of first-rate quality, and impresses one with the belief that such stones cannot but be the precursors to rich and lasting deposits at deeper levels. I may here mention that my opinion of the district generally is much strengthened by the recent discoveries made in the Cappagh Mine at the 80 fm. level, from which they have already raised between 70 and 80 tons of rich ore, yielding from 40 to 60 per cent. of pure copper, also at the Ballycummisk Mine, where they are sinking below the 114 fm. level, and raising large quantities of rich purple and yellow ore, and the lode improving in depth. These are undoubtedly the same lodes we have in Roaring Water, where I have no doubt we shall soon meet with like results. It was at first proposed to sink a perpendicular shaft from the surface in the most central and commanding position for all the lodes; but, on reconsideration, on seeing the mine a second time, I think it more advisable to sink on the course of Grady's lode, whereby we shall be sure to meet with the points of intersection with the other lodes, and, to a certain extent, be proving it (Grady's lode) as we sink on it; with this end in view the shaft has now been commenced, and will, in the course of next month, be communicated to the adit level, and must then be pushed downward as fast as possible. All necessary operations for carrying out the effectual working of the mine have been arranged, and I have great hopes that when carried out a good and profitable mine will be the result.—W. C. PAUL.

A highly influential company, to be carried on under the management of Messrs. John Taylor and Sons, and with such names as James H. Enthoven, Edmund Pontifex, and others equally experienced in the metal trades, upon the board of direction, has just been incorporated under the Companies Act, with limited liability, and a capital of 250,000*l.*, in shares of 10*l.* each. The object of the company, which has been designated the Pertusola Lead Mining and Smelting Company, is to purchase eleven-twelfths of the well-known Monteponi Lead Mines, in the Island of Sardinia, with the extensive lead smelting establishment of Pertusola and the Sarzanello Coal Mine in the Gulf of Spezia; the company have also taken general powers for acquiring interests in mines, purchasing and smelting ores, and desilverising lead in Italy. The purchase-money is 150,000*l.*, which leaves 50,000*l.* for working capital, which is estimated to be necessary, and 50,000*l.* for contingencies and possible extensions. The property is admirably situated, and has been very favourably reported upon by one of Messrs. John Taylor and Sons' most competent agents. The mines and works are in full operation, and yielding very large returns; the greater part of the capital will be called up within the first six months; but the profits that will accrue from the very outset of the company's operations afford the assurance of a satisfactory dividend at the end of the first year. In an article upon the mineral riches of Italy, recently published in the French *Journal des Mines*, the Monteponi Mines are specially referred to as amongst the most important. The writer remarks—In Sardinia we find a soil rich in every mineral production, and worked in remote antiquity by the Phœnecians, and their rivals the Carthaginians. These are the people, at once rich and enterprising, who taught the arts of mining and metallurgy to the Europeans at the same time as they taught them commerce. The Romans after the conquest did not neglect such productive mines as those of Sardinia, and in the middle ages the Genoese and the Pisans, those great Mediterranean merchants, those bankers of Europe, worked the argentiferous lead mines of the island on their own account, as one or the other, from time to time, possessed them. In modern times a greater calm prevailed, and the mines of Sardinia continued to be worked; it is only necessary at present to refer to Monteponi and Montevecchio, Gennemare and Correboy, to name the four principal centres of production which supply the raw material to the lead smelting-works of Marseilles.

The West Devon Consolidated Copper Mining Company have issued a prospectus for increase of capital. The number of shares already issued is 9983, the amount received having been applied to the purchase of machinery and the development of the mine. The shares issued are 1*l.* shares, and it is now proposed to issue an additional 10,000 at 10*s.* each, to rank equal to the 1*l.* shares. Captain James Seccombe reports that during his inspection he visited the West Maria and Fortescue Mine, and ascertained, as nearly as he could, the bearing of the newly-discovered lode in their sett, and obtained every information respecting the trials made both in opening up the backs at surface and exploring the lode. He believes there are reasonable grounds for supposing that it passes through the West Devon sett.

The Wicklow General Mining Company, with a capital of 40,000*l.*, in shares of 2*l.* each, has issued its prospectus, which will be found in another column of this Journal. The object of the company is to work mines and quarries in the county of Wicklow, and in the same locality as those of the Wicklow Copper and Sulphur Mining Company, which is at present in a prosperous and dividend-paying condition. The mines are near Rathdrum, and seven miles from the port of Wicklow, the property extending over 792 acres, and adjoining the Connorree Mines. A large amount of capital has been expended in exploring the surface and laying open the lodes, sinking shafts, and preparing the mines for the reception of machinery. In addition to the mines now worked, powers have been taken to work such other mines or quarries, and to carry on such works in connection therewith, as may be deemed desirable.

The London Scrap Ironworks Company, with a capital of 25,000*l.*, in shares of 1*l.* each, has been formed for the purpose of purchasing and carrying on the works at Greenwich known by the same name, and now in active operation for the conversion of the scrap iron of London into the best finished merchant iron. The works have been purchased for 10,000*l.*, of which 4000*l.* is to remain on mortgage at 5 per cent., 4000*l.* to be in paid-up shares, and the remaining 2000*l.* in cash. There is at present realised a nett profit of 1*l.* 10*s.* per ton, and it is estimated that, after allowing for adverse contingencies, a dividend of not less than 25 per cent. per annum on the paid-up capital may fairly be expected. It is intended to extend these operations by including in the business of the company the manufacture of forgings, girders, railway bridges, arches, &c., for which the works and premises are already well adapted.

COAL MARKET.—Only Monday, only 35 ships having arrived, there was an animated demand for house coal, and upon second and third class sorts there was an advance of fully 3d. per ton. In Hartley's and manufacturers' a steady business, at previous quotations, and a complete clearance was effected.—On Wednesday, being the "Derby" day, there was, by a resolution of the coal merchants, no attendance at market.—On Friday, the arrivals, since Monday, amounted to 204 ships. The cold stormy weather produced an active demand for house coal, which realised a general advance of 3d. per ton. Hartley's and manufacturers' were in request, at Monday's prices. Hetton Wallsend, 16s. 9d.; South Hetton Wallsend, 16s. 6d.; Braddyll's Wallsend, 15s. 6d.; Kelloe Wallsend, 15s. 6d.; Stewart's Wallsend, 16s.; Eden Main, 14s. 6d; Harton Wallsend, 14s. 6d.; Heugh Hall Wallsend, 14s. 6d.; South Kelloe Wallsend, 14s. 9d.; Framwellgate Wallsend, 14s.; Davison's West Hartley, 14s. 9d.; Hasting's Hartley, 14s. 9d.; Tanfield Moor, 13s.; Bute's Tanfield, 13s.: 46 cargoes unsold; 20 ships at sea.

At Truro Ticketing, on Thursday, 6146 tons of ore were sold, realising 25,709*l.* 3s. 6d. The particulars of sale were:—Average standard, 117*l.* 3s.; average produce, 5⅞; average price per ton, 4*l.* 3s. 6d.; quantity of fine copper, 363 tons 14 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
April 23	4930	£119 12 0	5⅞	£4 5 0	£72 12 0
„ 30	2950	113 2 0	6⅝	4 15 0	71 14 0
May 7	3652	110 14 0	7⅛	5 3 6	72 5 0
„ 14	2971	111 1 0	6¾	4 16 0	70 12 6
„ 21	6146	117 3 0	5⅞	4 3 6	70 14 0

Compared with last week's sale, the standard is stationary. Compared with the corresponding sale of last month the decline has been in the standard 2*l.* 9s., and in the price per ton of ore 1s. 6d.

At the Devonshire Great Consolidated Copper Mining Company board meeting, held yesterday, the directors declared a dividend of 9216*l.*, being 9*l.* per share, arising from profits on sales of copper ores sampled in the months of January and February last. After payment of the same there remains in hand a balance of 22,646*l.* 3s. 3d. in cash, ore bills not at maturity, and reserve fund, applicable to the general purposes of the company.

At Wheal Owles meeting, on May 15, the accounts for Jan., Feb., and March showed—Balance last audit, 1685*l.* 11s. 2d.; tin sold (less dues, 1-25th, 174*l.* 0s. 7d.), 4176*l.* 14s. 10d.; subsist receipts, 219*l.* 9s. 6d.; sundry credits, 14*l.* 8s. = 6096*l.* 3s. 6d. —Labour cost, 2752*l.* 7s. 2d.; carriage, 64*l.* 1s. 10d.; merchants' bills, 977*l.* 7s. 10d.; subsist advances, 218*l.* 14s.; by dividend (5*l.* per share), 400*l.*: leaving balance now in favour of adventurers, 1683*l.* 12s. 8d. Work performed during the quarter:—168 fms. 3 ft. 9 in. driven in levels, and 69 fms. 0 ft. 9 in. sunk in shafts and winzes: 12 pares stoping on tut for tin, and 34 pitches on tribute.

At Wicklow Copper Mine Company meeting, on Tuesday (Mr. Edward Wright in the chair), the report and accounts were received and adopted. A dividend of 1*l.* per share was declared. Messrs. Barnes and M'Dowell, who retired by rotation, were re-elected directors, and Mr. Robert Cully auditor. At the special meeting, held immediately after, the bill applied for to authorise the amalgamation of the Hibernian Mine Company with the Wicklow Mine Company was approved. Thanks were voted to the Chairman, secretary, and other officers.

At the Great North Tolgus Mine (special) meeting, yesterday (Mr. J. Janyon in the chair), an adjournment took place to enable the secretary to take a legal opinion as to the right of transferring 7800 shares, upon which a call of 2s. per share is due. The details will appear in next week's Journal.

At New Rosewarne Mine meeting, on Monday, the accounts showed a debit balance of 521*l.* 13s. 5d. A call of 20s. per share was made. Captains Vivian, George, and Michell reported that from the results which they have already met with, and from the appearance of the lode generally about Bickford's shaft, and westward from thence, they consider the prospects of the western part of the mine favourable for the discovery of profitable ground therein.

At the Wheal Buller meeting, on Tuesday, the accounts for March and April showed a credit balance of 304*l.* 0s. 8d. The loss on the two months' working was 128*l.* 17s. 5d. Capts. Davey, Johns, and Uren reported upon the points of operation.

At the Wheal Grenville meeting, on Wednesday, the accounts showed a debit balance of 119*l.* 12s. 11d. No call was made. The sales of ores during the past quarter amounted to 1628*l.* Capts. Odgers and Bennetts, in reporting on the mine, say—"We have 30 men on tribute, varying from 4s. to 13s. 4d. in 1*l.*; tutwork underground, 66 men and 5 boys; surface, 9 men, 2 boys, and 12 girls. The engine and machinery are working very well. We hope the next quarter's returns will be equal to this; and in conclusion, we can only add our former expressed opinion, that seeing the orey ground driven through the 110, 100, 90, and 80 fm. levels, we have every confidence of meeting ore in the 120, 110 cross-cut north, and the 66; and again, seeing the large and kindly lode at the 100, which we shall quickly see in the 90 and 80 fm. levels, with the good bunch of tin in the new shaft, sinking below the 80, and the chances of meeting one or two lodes in the 80 cross-cut north, this mine is destined to become a permanent and valuable property."

At the Gurlyn Mine meeting, on Wednesday, the accounts for the five months ending March showed a debit balance of 1638*l.* 7s. 2d. A call of 6s. 10½d. per share was made. The report of the agents upon the position and prospects of the mine will be found among the Mining Correspondence.

At the Wheal Hartley meeting, on Tuesday, the accounts for the eight months ending March showed a debit balance of 286*l.* 14s. 2d. A call of 1*l.* per share was made. Messrs. Hocking and Son were appointed engineers, and Capt. P. Skewes, underground agent. Capts. Joseph Vivian and Phillip Skewes reported upon the various points of operations.

At Wheal Unity Consols meeting, on Tuesday, the accounts showed a debit balance of 1329*l.* 15s. 2d. A call of 4s. per share was made. The unpaid calls amount to 135*l.* 4s. 3d.

At the Frank Mills Mine meeting, on May 12 (Mr. W. T. Smith in the chair), the accounts showed a debit balance of 517*l.* 8s. 5d. Capts. J. P. Nichols and J. Cornish reported upon the various points of operation. The mine, with all the machinery in connection therewith, is in very efficient working condition.

At East Devon Great Consols adjourned general meeting, at Exeter, on May 15, to receive the captain's report on the fine lead lode discovered in the 70, it was unanimously resolved, in consequence of the great improvement which has occurred, to continue the workings with all possible despatch in conformity with that report.

At Wheal Emily Henrietta meeting, on May 18, the accounts showed a debit balance of 134*l.* 3s. 3d. A call of 15s. per share was made. Capts. J. Daw and M. Harris reported on the mine: they say "We think the mine never looked better than at present. The new whim-engine has been completed since the last meeting, and is working well."

At Wheal Sithney and Carnmeal United Mines meeting, on May 14, the accounts showed a debit balance of 1090*l.* 19s. 1d. A call of 10s. per share was made.

At the Bon Accord Copper Mining Company (annual general) meeting, yesterday (Mr. W. H. Dickson in the chair), the report of the directors (the chief points of which have already appeared in the Journal) was taken as read. The Chairman, in moving its adoption, stated that since he last addressed proprietors the mining operations near the surface had been continued; but he was sorry to say successful results had not been realised. The directors, under the best advice, had come to the unanimous and decided conclusion that the property should be developed to a greater depth. The shaft had already been sunk 50 fathoms, and, assuming the proprietors approved such a course, the directors were disposed to have the shaft sunk to a 60 or 70 fm. level; but they felt it would not become them to adopt this step without a decided expression of opinion of the part of the proprietors. As regards the policy of testing the property in depth, he might remind them of the fact, adverted to in the report, that it was the opinion of the most capable man, Mr. Thomas Burr, who even reported upon the Bon Accord property, "that any quantity of ore could be raised from ground above the water level." To the same effect was the report of Mr. Hermann Boeger, written after inspecting the property some years later. He thus wrote:—"Practical miners at the Burra have a very high opinion of Bon Accord. It is supposed great quantities of ore exist there, and that it dips from the Burra towards your property, but it will have to be looked for at a considerable depth." Since the explorations near the surface had been unsuccessful, the inference must be that the conclusion to which those authorities arrived was a correct one. Having read several extracts from the report of the directors, he stated that the funds at present at disposal amounted to nearly 10,000*l.* The proprietors were in full possession of all that had been done, and, therefore, they were as well able to judge of the results likely to be realised from sinking the shaft to an increased depth as were the directors themselves. The meeting, therefore, had to consider and determine upon the question whether the shaft should be sunk to the depth suggested, or whether it would be better to realise the property and divide the assets. As far as the directors were concerned, they would content themselves by merely expressing their opinion, but it was their desire that the proprietors should come to a decision uninfluenced by any views the board might entertain. The motion for the adoption of the report and accounts having been duly seconded was put and carried. A somewhat lengthened discussion ensued, which resulted in the unanimous adoption of the following resolution:—"That the directors be and hereby are requested to carry out further exploration at greater depth in the Bon Accord property, taking and being guided by competent professional advice." The retiring directors (Messrs. Alexander Lang Elder and Adolphus William Young) were re-elected. Mr. Adolphus Bourse was re-appointed auditor. A vote of thanks to the Chairman and directors was passed, which terminated the proceedings.

NEWCASTLE, MAY 21.—During the past week the Mining Market has been active for Harwoods and Tyne Heads, the continued improvements in both mines making them exceedingly cheap compared with many "market mines." Harwood has 30 tons of ore ready for market, besides a considerable credit balance. The meeting will be held next month, when the first dividend will be declared. At Tyne Head the recent discoveries are very rich in silver.—EDWARD BREWIS, 49, Grey-street.

LEEDS, MAY 21.—Only a limited amount of business has been transacted in Mining Shares, and a quiet tone has prevailed throughout the week. In our last report of Hebden Moor meeting, it should have been stated "the meeting was held at the mine," instead of "Leeds," and that the last dividend of 1s. 6d. was paid a few "months since," instead of a few "weeks."—J. GLEDHILL.

WHEAL ELLEN (S.A.) MINING COMPANY.—A parcel of silver-lead from the mine, just arrived from Adelaide, showed on assay—

Fine silver ..... 104 oz. 0 dwt. } per ton of 20 cwts.
Fine gold ..... 2 10 }

And has been sold at 52*l.* 7s. 6d. (less 2½ per cent.) per ton.

TRETOIL AND MESSER MINING COMPANY.—Vice-Chancellor Wood has made a call of 15s. per share, to facilitate the winding-up of this company; the call to be paid to Mr. F. Whinney, official manager, Serle-street, Lincoln's Inn.

EXPORTS OF IRON AND STEEL.—The iron trade of this country would seem to be in a very prosperous condition, judging by the export returns last published. By them it appears that in the first quarter of this year the total value was upwards of 2,500,000*l.* sterling, an amount almost 500,000*l.* larger than in the corresponding quarter of 1862. In every description, with the exception of that designated as "wrought of all sorts," an increase appears, the most important being on "hoops, sheets, and boiler plates," also on railway iron. Towards this enhanced aggregate value the United States contributed 171,752*l.*; while France, on the contrary, has received of this metal 50,000*l.* worth less than in the three months of last year. The statement which follows shows the declared value of each description of iron exported from the United Kingdom in the first quarters of the years 1862 and 1863, specifying the increase or decrease thereon respectively:—

DECLARED VALUE—THREE MONTHS ENDED MARCH 31.

	1862.	1863.	Increase.	Decrease.
Iron, pig and puddled	£234,994	£258,631	£ 23,637	—
Bar, angle, bolt, and rod	419,750	528,016	108,266	—
Railroad, of all sorts	482,530	596,206	113,676	—
Wire	43,207	100,977	57,770	—
Castings	113,814	166,831	53,017	—
Hoops, sheets, and boiler plates.	166,156	287,088	120,932	—
Wrought, of all sorts	400,935	396,895	—	£4040
Old, for re-manufacture	9,709	15,364	5,655	—
Steel unwrought	178,185	186,468	8,283	—
Totals	£2,049,280	£2,536,476	£491,236	£4040
Deduct			4,040	
Increase in 1863			£487,196	

In this table, manufactures of various descriptions of iron and steel, such as are classed under the headings "hardware and cutlery," "machinery and millwork," are not included.

To Directors, Solicitors, Secretaries, &c.

IMPORTANT TO ALL CONNECTED WITH PUBLIC COMPANIES.—Now ready, price 2s. 6d., A HANDY BOOK OF WHAT TO DO AND HOW TO DO IT, IN ORDER TO FORM ANY MERCANTILE, MINING, AND OTHER JOINT-STOCK, COMPANIES. Designed as a PRACTICAL GUIDE for Projectors, Promoters, Directors, Shareholders, Creditors, Solicitors, Secretaries, and other officers. By THOMAS TAPPING, Esq., of the Middle Temple, Barrister-at-Law, London: Published at the *Mining Journal* office, 26, Fleet-street, E.C., and to be had of all booksellers and newsmen.

MR. J. SYKES, LEEK, is a BUYER of 50 Crebor, 20 Blue Hills, and 30 Unity. Sellers will please state lowest price. And a SELLER of 20 Dale, 5 West Condurrow, and 5 Caradon Consols.
J. SYKES strongly recommends an immediate purchase of Crebor and Blue Hills, as both are sure to have a great rise.

MR. C. STUART BARKER, MINERAL AGENT, 12, BUCKINGHAM STREET, STRAND, LONDON, has UNUSUAL FACILITIES for NEGOCIATING PARTNERSHIPS, and DISPOSING OF COLLIERIES, IRONWORKS, and MINERAL PROPERTIES of EVERY DESCRIPTION. Proprietors disposed to sell or let, and parties desirous of purchasing or leasing, may generally accomplish their wishes through this agency.

NOTICE.
BLACKSWARTH LEAD SMELTING WORKS, ST. GEORGE'S, NEAR BRISTOL.—MESSRS. JAMES AND JOSIAH WILLIAMS, MANUFACTURING SILVERSMITHS, of BRISTOL, beg to announce that they have succeeded the late Thomas Somers, Esq., in the above works, and will be happy to receive samples of lead and silver ore from the various mining companies, addressed 18, St. Augustine's Parade, Bristol.

IRON SEPARATED FROM TIN, COPPER, BRASS, or ANY KIND of DUST, by W. T. B. ALLDAY, PATENTEE, 155, MOSELEY STREET, BIRMINGHAM.

TO MINING ENGINEERS AND OTHERS.—ON SALE, an excellent 20 horse power HIGH PRESSURE BEAM ENGINE, 4 ft. stroke, heavy fly-wheel complete, with governor, force pump, and deep well pump, &c. Also, TWO CENTRIFUGAL WATER WHEELS, or turbines; outside diameter of casings 4 ft., and 3 ft. 6 in. Quite new, and can be had cheap.—Apply to Mr. WM. PHILLIPS, 46, Dale-street, Liverpool.

SWANSEA BITUMINOUS COAL FIELD.—TO BE SOLD, BY PRIVATE CONTRACT, a WORKING COLLIERY, on the best seams in the district, equal to an output of 100 tons per diem, situated close to the South Wales Railway, and within six miles of the port of Swansea. MACHINERY, PLANT, and railway sidings in first-rate condition. Royalties and sleeping rents very favourable. Purchase money moderate.—Particulars, and inspection of colliery plans, may be had of D. H. JONES, Esq., C.E., Cambrian-place, Swansea.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—My professional engagements have prevented me addressing you for some time on this interesting subject. In my last letter I foretold the general character of the weather for April and May; for the latter month fine growing weather, and certainly, as regards the crops of every kind, never did the prospects of the country look better. But, alas! the good things in store for us now will be of brief duration. A season of misery will overtake us at the close of this year. I have received numerous letters to ask me if this will be so. I can only give one reply, that such is my conviction. With reference to the immediate future, the weather will be rather changeable to the end of the month, on the whole fine growing weather; about the 28th some what, with thunder and lightning showers; in the month of June the weather will be fine for the crops. Some rather strong winds from the 4th to the 6th, with showers and some thunderstorms locally about the 14th. There will be an average fall of rain during this month. Another comet (if not a second of these bodies) is approaching the sun. One of these bodies ought to be discovered in about three weeks from this.

GEORGE SHEPHERD, C.E.,
Author of the "Climate of England."

26, *Throgmorton-street, May* 22.

LEAD ORES.

Sold on the 3d May.

Mines.	Tons.	Price per ton.	Purchasers.
Frank Mills	40	£16 5 0	Stock & Co.
ditto	55	13 3 6	ditto
South Exmouth	65	11 11 0	Panther Co.
Sold on the 18th May.			
Frongoch	85	12 10 0	Panther Co.
ditto	85	12 12 6	ditto
East Darren	80	15 2 6	ditto
Cefn Brwyno	42	12 10 6	ditto
Cwm Erfin	25	15 12 6	ditto
ditto	35	16 2 6	J. & J. Williams.
Bronfloyd	50	13 7 6	Panther Co.
Newtownards	50	12 11 0	Walker, Parker, &Co.

BLACK TIN

Sold from the 24th April to the 9th May.

Mines.	Tons	c.	q.	lbs.	Price per ton.	Amount.	Purchasers.
Par Consols	51	9	2	22	£67 15 0	£3488 1 10—	—
ditto	5	5	3	17	47 0 0	248 17 6—	—
West Fowey Cons.	29	3	1	22	67 10 0	1969 2 4—	—
Sold on the 13th May.							
Penhalls	4	7	2	14	—	297 18 6—	—
North Basset	3	10	1	14	65 12 6	230 18 4—	Trethellan.
Sold on the 15th May.							
Wheal Vyvyan	1	6	1	4	63 12 6	83 12 5—	Harvey & Co.
ditto	0	5	0	2	40 0 0	10 0 8—	ditto
Trevenen, &c.	7	7	2	19	72 0 0	535 6 1—	ditto
ditto	0	19	0	6	57 15 0	55 0 3—	ditto
Sold on the 20th May.							
St. Day United	10	15	0	0	—	607 7 6—	—

COPPER ORES.

Sold at LIVERPOOL, by Mr. JAMES LEWIS, on the 18th May.

Mines.		Tons.	Price per ton.	Purchasers.
Canadian	(ex *St. George*)	90	£15 18 0	Newton, Keates, & Co.
ditto	(ditto)	15	15 17 0	ditto
Knockmahon	(ex *Fairy*)	65	9 0 6	Bibby, Sons, & Co.
ditto	(ditto)	65	8 16 6	ditto
ditto	(ex *Ellen*)	50	8 17 6	ditto
ditto	(ditto)	50	8 12 6	ditto
ditto	(ex *West Docks*)	70	8 14 6	ditto
ditto	(ditto)	70	8 14 0	ditto
Chile	(ex *Chilee*)	60	18 5 6	St. Helen's Co.
ditto	(ditto)	60	18 4 6	Newton, Keates, & Co.
ditto	(ditto)	60	18 0 0	St. Helen's Co.
ditto	(ditto)	60	17 18 6	Newton, Keates, & Co.

COPPER ORES.

Sampled May 6, and sold at the Royal Hotel, Truro, May 21.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols	127	£5 5 6	Hingston Down	79	£2 15 6
ditto	123	4 11 0	ditto	78	2 16 6
ditto	122	4 18 6	ditto	66	4 18 6
ditto	120	4 19 6	ditto	64	2 13 6
ditto	118	4 17 6	ditto	63	3 2 6
ditto	115	5 5 6	ditto	55	3 13 0
ditto	112	4 5 6	Marke Valley	84	2 18 6
ditto	110	5 4 0	ditto	83	2 13 0
ditto	107	3 15 0	ditto	80	2 13 6
ditto	105	5 7 6	ditto	64	4 16 6
ditto	104	5 4 6	ditto	53	1 8 6
ditto	102	4 16 6	ditto	36	1 7 6
ditto	100	5 0 6	Wheal Edward	61	4 9 0
ditto	88	4 16 6	ditto	48	3 11 0
ditto	87	5 1 0	ditto	47	3 4 0
ditto	86	9 17 0	ditto	43	1 8 0
ditto	78	2 8 6	ditto	23	4 2 0
ditto	74	5 1 6	Bedford United	107	4 14 6
ditto	62	4 13 6	ditto	99	4 6 6
ditto	61	9 7 6	Kelly Bray	109	5 16 6
ditto	55	3 17 6	ditto	61	1 17 6
ditto	47	1 18 0	ditto	36	5 4 0
ditto	23	2 10 0	Holmbush	53	9 3 0
ditto	22	6 6 6	ditto	52	9 0 6
ditto	18	3 3 6	ditto	51	2 19 6
Phœnix Mines	91	2 19 6	ditto	34	2 19 6
ditto	87	2 3 0	Wheal Friendship	75	2 15 0
ditto	85	4 7 6	ditto	55	2 8 6
ditto	81	7 10 6	ditto	52	9 6 6
ditto	79	1 14 6	Wheal Yarner	175	2 10 6
ditto	60	4 6 6	East Russell	54	4 17 0
East Caradon	90	3 14 6	ditto	50	3 9 6
ditto	87	3 10 6	ditto	48	3 12 6
ditto	78	3 2 6	Wheal Emma	56	3 9 6
ditto	70	3 6 6	ditto	48	1 7 6
ditto	54	6 16 0	ditto	28	5 15 0
ditto	52	5 13 6	Brookwood	60	3 7 6
ditto	49	6 13 0	ditto	30	5 16 6
New Wheal Martha	93	2 10 6	ditto	10	8 12 6
ditto	84	2 6 0	Lady Bertha	45	2 7 0
ditto	80	2 15 6	ditta	41	1 5 6
ditto	60	2 17 0	Wheal Crebor	82	3 6 6
ditto	54	2 15 6	Collacombe	27	3 1 6
ditto	35	1 16 6	Fursdon	25	2 17 6
ditto	20	8 15 6			

TOTAL PRODUCE.

Devon Great Cons.	2166	£10,857 9 6	Wheal Friendship	732	£ 824 10 6
Phœnix Mines	484	1837 2 0	Wheal Yarner	175	441 17 6
East Caradon	480	2106 11 6	East Wheal Russell	152	609 13 0
New Wheal Martha	426	1210 5 0	Wheal Emma	132	421 12 0
Hingston Down	405	1333 9 0	Brookwood	100	463 10 0
Marke Valley	400	1193 9 6	Lady Bertha	86	158 0 6
Wheal Edward	222	746 15 0	Wheal Crebor	82	272 13 0
Bedford United	206	933 15 0	Collacombe	27	83 0 6
Kelly Bray	206	936 10 0	Fursdon	25	71 17 6
Holmbush	190	1207 2 6			

Average Standard ..... £117 3 0 | Average Produce 5⅞
Average Price per ton £4 3 6
Quantity of Ore ..... 6146 tons | Quantity of Fine Copper, 363 tons 14 cwts.
Amount of Money £25,709 3 6
LAST SALE.—Average Standard ..... £111 1 0.—Average Produce 6¾
Standard of corresponding sale last month, £119 12 0.—Produce, 5⅞.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	1192½	£4796 19 0
Freeman and Co.	282½	1137 4 3
Grenfell and Sons	498	2003 10 10
Sims, Willyams, and Co.	761½	3208 2 6
Williams, Foster, and Co.	893	4167 14 3
Mason and Elkington	191½	646 16 7
Bankart and Sons	174	675 3 0
Copper Miners' Company	581 8-8	2271 13 4
Charles Lambert	730½	2283 17 0
Newton, Keates, and Co.	261	1151 4 6
Sweetland, Tuttie, and Co.	291	1064 11 6
Neath Copper Company	359½	1456 3 9
Penclawdd Copper Co.	78	189 3 0
Total	6146	£25,709 3 6

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Par—South Caradon 484—West Caradon 466—Great Wheal Busy 441—North Treskerby 407—Clifford Amalgamated 332—Fowey Consols 328—Wheal Polmear 201—North Downs 198—Craddock Moor 159—St. Day United 100—South Crinnis 52—Burra Burra 35—Tredinnick's Ore 35—Wheal Damsel 18—North Phœnix 7—Trevethan's Ore 6—Barratt's Ore 5—Aver's Ore 2.—Total, 3276 tons.

Copper ores for sale on Thursday week, at Tyack's Hotel, Camborne.—Mines and parcels.—Clifford Amalgamaged 962—West Seton 579—Wheal Seton and Pendarves 374—East Pool 275—South Frances 214—Wheal Basset 172—Tincroft 130—South Tolgus 130—Dolcoath 113—East Basset 107—Stray Park 54—North Roskear 39—Camborne Vean 35—Condurrow 33—Crane 7.—Total, 3224 tons.

Copper Ores for sale at Swansea, May 26.—Berehaven 127, 119, 100, 95, 110, 63, 104—Chili 48, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 65—Cobre 87, 86, 85, 76, 92, 46, 45—Cape Copper Mining Company 50, 47, 44, 43, 18, 37—Knockmahon 65, 60—Yudanamutana 40, 50, 35—Great Northern Mining Company (South Australia), 46, 45, 1—Laxey 117—Kanmantoo 13, 10.—Total, 2610 tons.

THE PERTUSOLA LEAD MINING AND SMELTING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862, with limited liability.
Capital £250,000, in 25,000 shares of £10 each.
Deposit on application £1 per share, and on allotment a further payment of £2 per share.
Calls not to exceed £2 per share, at intervals of three months.

DIRECTORS.

CHARLES BELL, Esq. (Messrs. J. Thomson, T Bonar and Co.)
JAMES H. ENTHOVEN, Esq. (Messrs. H. J. Enthoven and Sons).
JOHN P. JUDD, Esq. (Messrs. Nathaniel Johnston and Sons).
JOHN ORRED, Esq., Ashwicke Hall, Gloucestershire.
EDMUND A. PONTIFEX, Esq. (Messrs. Pontifex and Wood).
JOHN TAYLOR, Esq. } (Messrs. John Taylor and Sons).
RICHARD TAYLOR, Esq. }

BANKERS—Messrs. Barnett, Hoares, and Co., London; Messrs. J. Barned and Co., Liverpool.
SOLICITORS—Messrs. John and William Gelsworthy, 12, Old Jewry Chambers.
BROKERS—Messrs. Joshua Hutchinson and Son, Angel-court, Throgmorton-street.
MANAGERS—Messrs. John Taylor and Sons.
GENERAL SUPERINTENDENT IN ITALY—Mr. George Henfrey.
SECRETARY—Mr. W. G. Williams.

OFFICES,—6, QUEEN STREET PLACE, LONDON.

This company has been duly registered with limited liability. Arrangements having been made for the purchase of a large interest in the celebrated lead mines of Monteponi, in the island of Sardinia, together with the extensive lead smelting establishment of Pertusola, and the Sarzanello Coal Mine, in the Gulf of Spezia, this company has been formed for the purpose of completing the purchase, and for working the said mines and smelting works, with general powers for acquiring interests in mines, purchasing and smelting ores, and desilverising lead, in Italy.

The Monteponi Mines, like many of the most productive lead mines, are situated in a formation of limestone, the mountainous character of which renders it practicable to obtain a very large produce by means of horizontal levels driven into the lodes, without the employment of machinery. Mining of this simple kind is naturally very inexpensive, and when rich lodes are met with the profits are very large.

From the official statistics contained in the work of Marchese, on the mineral wealth of the Island of Sardinia, it appears that the produce of the mines of Monteponi amounted in the year 1851 to 1664 tons, and that it had risen in 1860 to more than 6000 tons, and the same rate of production has since been fully maintained.

A careful examination of the mines was made in the month of January last, by one of Messrs. John Taylor and Sons' most competent agents, whose report has satisfied them that not only will the deposits of ore already in work continue to yield large quantities, but that by a well-directed system of mining the rate of produce may be largely increased, and the expense of raising the ore considerably reduced.

The Pertusola Lead Smelting Works, situated near Lerici, in the Gulf of Spezia, were founded in the year 1855, and subsequently passed into the hands of the present proprietors, Messrs. E. Franei and Co., of Turin. These gentlemen having determined to adopt the improved methods of mining and smelting practised in England, placed the technical management of their establishments in the hands of Messrs. John Taylor and Sons, under whose direction the works have been completely remodelled, provided with every requisite for smelting and desilverising 7000 or 8000 tons of ore per annum, and so laid out as to be capable of easy enlargement.

Situated in an excellent harbour, and having a pier and every convenience for vessels, the Pertusola works are admirably placed for receiving lead ores, not only from the Island of Sardinia, which in 1862 produced no less than 18,000 tons, but likewise from all parts of the Mediterranean.

The Monteponi ore is a remarkably pure galena, assaying more than 80 per cent. of lead, and containing about 7 ozs. of silver in the ton of ore. The lead made from it is of excellent quality, and a ready sale is found in Italy for the whole produce of the Pertusola works.

The Mine of Sarzanello, producing lignite coal of a superior description, is distant about five miles from the smelting works; it has been opened up on the English system. A new winning, by means of a pit provided with a steam-engine and suitable pumping and winding apparatus, has just been completed to the depth of 120 yards, and everything is now in readiness for raising large quantities of coal.

A section of the Riviera Railway, opened a few weeks since, and passing within one mile of the mine, gives direct communication with Pisa, Leghorn, and Florence, and the completion of this line will afford also means of land transport for the coal to Genoa and the whole of the North of Italy.

Upon taking possession of the Pertusola Works, Messrs. E. Franei and Co. entered into a contract with the Monteponi Mining Company for the purchase of three-fourths of the ores which might be produced from their mines during three years, the other one-fourth being taken by Messrs. P. Bontoux and R. Taylor, of Couëron, in France; and this contract has been since renewed for a further term of 10 years.

Under the advice of Messrs. John Taylor and Sons, it was determined to render the works independent of the uncertainties of terminable contracts, by acquiring such an interest in the rich mines of Sardinia as would secure permanent supplies of ore for the furnaces, as well as a participation in the profits of the mines themselves.

The execution of this project was deemed a suitable object for the application of associated capital, and having made provisional contracts for the purchase of eleven-twelfths of the Monteponi Mine, Messrs. E. Franei and Co. have now agreed to transfer the same to this company, with the Pertusola Lead Smelting Works and Sarzanello Coal Mine.

The amount of purchase money for the interest in the mines, and the other properties, including the entire plant, and all engines, machines, and tools in use in the smelting works and coal mine, is £150,000, and it is estimated that £50,000 will be required as floating capital, so that in fixing the nominal capital at £250,000, a margin of £50,000 is left to enable the company to take advantage of such opportunities as may present themselves of extending their interest in Italian mines.

This undertaking differs essentially in its nature from ordinary mining enterprises. Its capital being invested in the purchase of mines and works which are in full operation, and yielding very large returns, the greater part will be called up within the first six months, while, on the other hand, the profits, which will accrue from the very outset of the company's operations, afford the assurance of a satisfactory dividend at the end of the first year.

Application for shares must be made in the form which may be had at the offices of the company, No. 6, Queen-street-place, London, or of the brokers of the company. No application will be considered unless a deposit of £1 for each share applied for shall have been previously made with the bankers of the company. This sum will be returned in full in the event of no allotment being made.

WEST DEVON CONSOLIDATED COPPER MINING COMPANY (LIMITED).

Operations in this mine were resumed by the present company about two years since, with a capital of £10,000, leaving after purchase of lease, &c., £5500*l.*, which amount has been found insufficient to develope the lodes which have proved so eminently rich in Devon Great Consols, whose lodes traverse the sett, the boundary of the two mines being the River Tamar.

The discoveries at West Wheal Maria and Fortescue on the east, at New Wheal Martha (where the lode is worth 20 tons per fathom) on the west, with the recent discovery at Latchley Consols (where the lode is producing 10 to 5 tons per fm., and which is within a few fathoms of the boundary of and running parellel with the lode in West Devon) on the south, are among the many chief features of this mine.

The greatly-improved prospects which are now opened by the development of surrounding mines have induced the proprietors of West Devon Consols to determine on issuing 10,000 more shares at 10s. per share, to rank equally with the 10,000 £1 paid shares, and to give the mine a more vigorous and efficient trial, by opening out its vast mineral resources, of which there can be no doubt. The property, with this view, has been recently inspected by Capt. JAMES SECCOMBE, of East Phœnix and other mines, whose opinion of its prospects and early success fully confirms those previously furnished by Capt. JAMES RICHARDS, of Devon Great Consols; Capt. THOMAS GILL, late mineral agent for the Duchy of Cornwall; Capt. Z. WILLIAMS, of Wheal Friendship; Capt. JAMES DONNAL, of Devon Union; and JEHU HITCHINS, Esq., of London. Copies of whose reports, with the fullest and most satisfactory information, will be supplied on application to the secretary, Mr. E. S. HARDING, No. 1, Great Winchester-street, London, E.C.; or Mr. JAMES LANE, No. 44, Threadneedle-street, London, E.C., who request that immediate applications for the remaining shares—which are being appropriated as applied for—should be made.—London, May 15, 1863.

CORNUBIA TIN MINING COMPANY (LIMITED).

INCREASE OF CAPITAL TO £20,000.
Original capital £14,000, in 7000 shares of £2 each.
REGISTERED OFFICES,—12, SOUTH PARADE, LEEDS.

These mines are situated in the county of Cornwall, in the St. Austell district, long celebrated for the production of tin, and during the past two years the company have expended upwards of £14,000 in the erection of two powerful steam-engines, calculated to command the works for many years to come; erected 32 heads of steam-stamps; three water-wheels, one for stamping, and two designed for winding and drawing the ore; unwatered and secured four shafts, and very extensive underground works. Six large tin lodes are now being worked upon, and since the steam-stamps went to work in January last 16 tons of tin has been raised and sold for the sum of £1101; the sales of tin are now about £400 per month, and by the addition of 32 more heads of stamps, which the present engine is capable of driving, the returns may be more than doubled, at the small extra cost of labour only.

To erect the additional machinery with all speed, and which may be completed by the beginning of July next, it has been determined to issue 3000 new shares of £2 each, 10s. deposit, calls not exceeding 5s. per share, at not less intervals than three months, such shares to carry 10 per cent. preferential interest out of the first earnings of the company, and redeemable within three years, at 10 per cent. bonus upon the amount called up. The directors are of the opinion that not more than 20s. upon each share will be required.

At an extraordinary general meeting, held on the 27th inst., it was unanimously resolved to create such new capital, and upwards of 1000 shares were subscribed for; it was also further resolved that the remainder be offered to the public, according to priority of application.

Favourable reports of the position and prospects of the mine have been received from Capt. Charles Thomas, of Dolcoath; Capt. Josh. Vivian, of North Roskear; and Capt. Daw, of Carn Brea; which can be seen at the company's office.

The latest information from the agent at the mine will be found in the usual columns.

Applications in the form annexed are requested to be made to the secretary, JOHN EVERARD UPTON, Esq., 12, South Parade, Leeds.

To the Directors of the Cornubia Tin Mining Company (Limited).
Increase of Capital to £20,000 by issue of 3000 Preference Shares of £2 each.

I request you will allot to me ..... shares in the new issue, and I agree to accept them, sign the Articles and Memorandum of Association, and pay the deposit of 10s. a share on or before the 14th proximo.

Name .....
Address .....

Dated this ..... day of ....., 1863.

MR. GEORGE HENWOOD, MINING ENGINEER, LOCHHEAD HOUSE, LOCHWINNOCH, SCOTLAND, OFFERS his SERVICES and ADVICE on mines situated in any part of England, Scotland, Wales, Ireland, Isle of Man, &c. Mr. Henwood's extensive experience in his peculiar department of mining science is well known, and will be exerted to the utmost for the benefit of his clients.

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For 120,000 cubic feet of air per minute	.....			£180
160,000	"	"	"	220
200,000	"	"	"	260
250,000	"	"	"	300

APPLY TO THE
NORTH MOOR FOUNDRY COMPANY,
OLDHAM.
GENERAL ENGINEERS, and SOLE MANUFACTURERS of SCHIELE'S TURBINE WATER WHEELS, PLATT and SCHIELE'S SILENT FANS, BLAST ENGINES, &c.

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A good guide for investors, if they wish to invest in the mines of the district to which the book refers. By a careful perusal of its pages they cannot err. It is a carefully-written and well-authenticated book.—*City Press.*
London: Published by Effingham Wilson, Royal Exchange, E.C.

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Being No. 1 of a cheap edition of Mining Maps, to be issued monthly.
By BRENTON SYMONS, M.E.,
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The author has executed his work with care and ability, and has produced a handy-book on the law of mines which will be found sufficient for all purposes which a work of this kind can be expected to answer.—*Athenæum.*
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NEW WORK ON THE VENTILATION OF MINES
By RALPH MOORE, Mining Engineer.
Glasgow: M. Ogle and Son, Exchange-square.—London: Hamilton, Adams, and Co., Paternoster-row.

THE "CAUTIOUS MAN."—Mr. HALSE respectfully informs his clients that he has REMOVED to 28, THREADNEEDLE-STREET.
MR. HALSE will be happy to give his opinion as to the merits or demerits of any mine with which he may be acquainted. Speculators who are not his clients should enclose a stamped envelope. This is the time to buy good shares, not the time to sell them, but bad stock should be sold at all times—that is, if purchasers can be found for it, which is not often the case.—28, Threadneedle-street, London.
Bankers: The Metropolitan and Provincial Bank.

JOHN HALSE, STOCK AND SHAREBROKER, of 2, HATTON COURT, and the STOCK EXCHANGE, has NO CONNECTION with the PERSON of a SIMILAR SURNAME (christian name concealed) who advertises from 28, Threadneedle-street.

HOW TO SAVE MONEY.—Before buying a mine share, read TREVOIR AND CO.'S "MINES AND MINING," written specially to demonstrate the real profits of mining, and to protect the unwary from the heavy losses awaiting all who engage in the pursuit without experience. The information it imparts has cost many a speculator hundreds of pounds. Per post 13 stamps.—21, Sun-street, London, E.C.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

LIABILITY OF SHAREHOLDERS.—Will you be so good as to give me the name of the cause referred to in the Journal of March 15, 1862, relative to a shareholder being sued by a creditor, wherein "the Master of the Rolls indemnified the petitioner against existing or any other actions?" The fact is, I have been sued and compelled to pay a sum of money, which I wish to get back, with the cost of action, and any information on the subject will be thankfully received.—J. T. K.

[The case referred to in the Journal of March 15, 1862, was the Wheal Anne Mining Company, which is to be found reported in 30 Beavan, 601, and 6 *Law Times*, 38. In that case the Master of the Rolls suggested that it should stand over in the hope of an arrangement by the parties, and he intimated that in the event of an arrangement *not* being come to, he should wind-up the company. The adventurer was sued by a creditor for 25*l.*, and owed to the company 37*l.* 10s. for calls, and the Master of the Rolls suggested that it would be proper for the adventurer to pay 25*l.* of the 37*l.* 10s. to the creditor, and the surplus 12*l.* 10s. to the purser, the latter agreeing by his counsel to accept such payment to the creditor and the surplus in satisfaction of calls. The above facts will be found to be very different from those detailed in the letter of "J. T. K.;" but it may, nevertheless, be that the writer is entitled to relief; for the law of the Stannaries is clear, that if he as an adventurer has paid more than his share, he can compel contribution from his co-adventurers. Whether he can obtain his costs from his co-adventurers is a difficult point to decide, but, as a general legal principle, he cannot recover his costs, and for this reason, that he might have improperly incurred or paid them, or his attorney may be an exorbitant man. But, as before stated, it is possible that he is entitled to recover his costs also, but that depends upon all the facts of the case.]

NORTH ROSKEAR.—At the meeting in Jan. last it was stated by Capt. Vivian that in May following the mine would be in a position to declare a dividend. Such was the promise; now for the result. At the meeting on May 12 the accounts show a loss during the last bi-monthly working of 318*l.* 7s. 6d., and no explanation volunteered to distant shareholders. Some information, through the Journal, respecting this untoward state of affairs may surely be rendered to us by the officials.—A SHAREHOLDER.

EAST CARADON.—Some five months since Capt. Seccombe stated that the reserves in this mine were gradually increasing; if this be the case, how is it that a sufficient quantity of ore is not sampled to enable the committee to pay the usual amount of dividend? It may be said that this would not be fair mining; but, in reply to such a statement, it may be mentioned that a celebrated agent (Capt. Chas. Thomas) a short time since stated "the most legitimate use of reserves was to enable the manager so to regulate the quantity of the sales as to ensure the payment of regular periodical dividends." Against this view, I know, may be urged the fact that if any one time more than another was inopportune for trenching upon the reserves it would be just now, when the price of copper is so low. It is difficult for a novice desirous of investing in such a mine as East Caradon to comprehend the various bearings of this practical and important question. For example, when the shares stood at about 46, we were told by Capt. Seccombe that the reserves during the quarter had been increased by some thousands of pounds; the natural inference, therefore, to a non-practical would be that if at the next meeting any difference whatever took place in the dividend paid it would have been of an increased amount. But what do we find? Why this—at the very next meeting which followed that at which Capt. Seccombe made this encouraging statement with reference to the great increase of the reserves, not only that the regular dividend was not paid, but that a diminished amount was handed over to the shareholders. These apparent anomalies may, perhaps, be easily explained away by the adduction of some practical reason; but, until such an explanation has been made, considerable dissatisfaction must necessarily exist among a certain portion of the shareholders.—A. B. C.

BRAZILIAN WEIGHTS.—"E. F. W." (Edinburgh).—The *oitava* weighs 2 dwts. 7·33 grs., consequently 8 oits. would be equal to about 18 dwts. 9 grs. English.

WEST WHEAL MARIA AND FORTESCUE MINE.—In last week's Journal, I observe that the meeting strongly condemned the proceedings of certain parties who had filed a Bill in Chancery for the restoration of certain shares, on which calls had been due for several years. I know nothing of this Bill, or any proceedings on it; but this I do know, that I was induced to buy a share in West Wheal Maria of a former date, at a cost of 35*l.*, and it was ushered in with such glowing colours that the riches and glories of the then Wheal Maria (now Devon Consols) were to be reached in less than no time, and to ensure this 10*l.* calls were made upon the shares. The same glowing prospects were continued for some time, accompanied by the same heavy calls, until an unsuccessful result became apparent, and I lost my money—receiving the pittance of about 50*s.*, my moiety of the value of machinery, &c. I hope similar proceedings, and a similar fate, may not attend the present working, for the sake of the character attached to miners and mining.—VINDEX.

EAST BROOKWOOD.—Will some one interested inform me where the office of this company is, the name and address of the captain, and where I can obtain some reliable particulars, the principal shareholders, &c.?—MENTOR.

GREAT RETALLACK.—Referring to the agent's report, dated March 25, read at the meeting, he therein states that he shall drive on the Peru lode next month (April). We are now nearly in June, and not a word about the Peru lode in the weekly report. I wish to call the attention of the committee and shareholders generally to the importance of the lodes running north and south, especially the Peru. I for one am quite satisfied that if half the money had been spent on the development of the Peru which has been spent in working the great blende lode, and which has not returned a penny in the shape of profit, I should not have had occasion to subscribe myself—A DISAPPOINTED SHAREHOLDER.

MINING IN CARDIGANSHIRE.—We cannot publish the letter from "A Shareholder," under present circumstances. The particulars may be of use hereafter.

DALE MINE.—I have been a shareholder in this mine for many years, and have watched it through its ups and downs, as reported in your valuable columns, but somehow or other lately I have almost lost sight of it, with the exception of a line or two in the Journal from the captain, saying a fathom has been sunk during the week, or something to that effect. We see no reports of meetings, as we formerly did; nor do we get any quarterly balance-sheets. I have been looking over the one last issued, which brought the accounts up to June, 1862, and find at that date balance of liabilities over assets was 400*l.* 7s. 9d.; but in the assets I found an item of 960*l.* 2s. 10d., which, I understand, is a bad debt. Now, taking the expenditure for the last year, the same as the previous one, in round figures, 4000*l.* the amount of money to be found for the last 12 months will be about 5000*l.*; to meet this amount 9000 shares have been issued, at 7s. 6d., which will realise 3375*l.*, leaving a deficiency of 1635*l.* I should like to ask how the directors intend to raise the money? Do they think of issuing more shares? I really think it is the duty of the managers to let shareholders know how the finances stand.—A SHAREHOLDER

ST. DAVID'S GOLD MINING COMPANY.—May I be permitted to enquire the reason the directors of this company have so long deferred the holding of the first general meeting? It is stipulated by the Act that a meeting of shareholders shall be convened within twelve months after a company has been registered; and, therefore, to say nothing of the injury the undertaking is sustaining in the market by this peculiar proceeding, the directors are positively, although perhaps inadvertently, committing an illegal act. The holding of this meeting now becomes the more necessary, since improvements in the various adjoining properties are reported to have taken place.—AN ANXIOUS SHAREHOLDER.

GREAT WHEAL FORTUNE.—We are requested to state that the donation to the Botallack Accident Fund, on the recommendation of Mr. Pinckney, was 10*l.* 10s.—it was printed 10*s.* 10s. in last week's Journal. The error must have been evident to every careful reader.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, MAY 23, 1863.

WHAT IS STEEL?—It has often been a disputed point with metallurgists whether or not the carbon in steel should be regarded as determining its peculiar character, and whether steel is a definite chemical compound of carbon and iron. Still greater differences of opinion have existed as to whether carbon is the only substance that communicates to iron the character of steel; and with regard to the mode in which this effect is produced very little has hitherto been known.

Some very interesting observations have recently been made by M. CARON with regard to this latter point, which promise to throw an important light upon the nature of steel. It has long been known that when soft steel is dissolved by acids there remains a black substance resembling graphite, which is not soluble. KARSTEN considered this residue to be a compound of iron and carbon, and BERTHIER was of opinion that cast-steel contained a similar compound. The most remarkable fact is, that after steel has been tempered, scarcely any residue remains when it is dissolved by acids. It does not amount to more than one-eighth of that obtainable from the same steel before being tempered. It appears, therefore, that there is a true chemical change brought about by the tempering, and what is more remakable, hammering has a similar influence in reducing the amount of carbon that remains insoluble when steel is dissolved by acids. After long hammering it does not amount to more than eleven-sixteenths of that obtainable from the same steel before hammering; hence it appears that the chemical change which takes place in tempering steel also takes place to some extent when steel is hammered. M. CARON has examined a great number of different kinds of steel, and he found the amount of carbon remaining after dissolving the steel by acids to be invariably less in proportion to the amount of hammering the steel had received. He considers that the carbon remaining undissolved by the action of acids upon steel is not in a state of combination with the iron, and adopting the opinion that the quality of steel is better in proportion to the amount which, within certain limits, is chemically combined with the iron, he regards the improvement in the quality of steel produced by forging to consist in a more complete combination of the iron and carbon. He found also that rolled steel contained more uncombined carbon than hammered steel, a circumstance that agrees with the general experience that the quality of steel is less improved by rolling than by hammering.

As a general result of his observations, he comes to the conclusion that the influence of heat upon steel produces effects directly opposite to those produced by hammering or tempering. Thus, by annealing steel for a period varying from a few hours to several days, it was found that the amount of uncombined carbon remaining after solution by acids was always increased in proportion to the time of annealing and the degree of heat employed. Steel so annealed did not resume its original character until after it had been hammered or tempered.

In the same manner white pig-iron, which KARSTEN has shown to resemble tempered steel, as regards the chemical condition of the carbon it contains, was found to present the same variation in the amount of carbon remaining combined, and that existing in such a state as to remain undissolved by the action of acids upon the metal.

These changes in the chemical condition of the carbon in steel are evidently very intimately connected with corresponding changes in the qualities of the steel. The state of combination, between the iron and carbon which appears to be essential to steel of the best quality, is liable to be destroyed by the influence of heat, so far as entirely to destroy its most important qualities. Consequently, it becomes an interesting question to ascertain whether there are any means of preventing this liability to deterioration of quality in steel, and the investigation of this subject cannot fail to be of service in contributing towards a better knowledge of conditions determining those alterations of iron generally, which have hitherto appeared so inexplicable. Such alterations, for instance, sometimes take place in the axles of railway carriages and the tyres of wheels, resulting in the metal becoming brittle, and often giving rise to great disasters.

In tempering steel, the effect produced by plunging the heated metal into cold water is a sudden contraction of its bulk. The particles of the steel are suddenly brought together, as if by concussion, and M. CARON regards this action as presenting a very close analogy with the effect produced by hammering. He considers that it is this concussion that determines the combination of the iron and carbon contained in steel. He considers that the heating of the metal not only expands it, but also gives to its particles a certain mobility, necessary to enable them to combine, and that it is by the sudden concussion which takes place in cooling that combination is effected. He found that a bar of iron, raised to a bright red heat, and hammered on an anvil, covered with finely-powdered charcoal, until it had cooled to a dull red heat, and then plunged into cold water, was converted into steel at the surface. The same iron heated to redness, and cooled in powdered charcoal, did not present any signs of being converted into steel when it was tempered in the same way.

The combination of the iron and carbon, produced by hammering, is not so complete as that produced by tempering, because it causes a concussion of the particles of steel only in one direction, while the sudden cooling of heated steel in water causes a concussion of the particles in every direction at once.

The density of tempered steel is stated both by REAUMUR and RIN-

MANN to be less than that of soft steel, but KARSTEN considered it was not certain that all kinds of steel became of less density in tempering. M. CARON has, therefore, made a great number of experiments to determine this point, and the conclusions he arrives at are the following:—

1. Hammered-steel bars are reduced in length by tempering.
2. Round bars made in the usual way, partly by hammering and partly drawn out, are scarcely altered in length.
3. Plate-steel cut into strips increases both in length and width.
4. The density of steel is always reduced by tempering.

It appears, therefore, that a bar of steel may, in tempering, become altered in its dimensions in a different manner, according to the way in which it has been worked. This will account for the fact that such articles as files sometimes become twisted in tempering; if one side be hammered more than the other it will contract more than the latter, and thus produce a twist.

The influence of the sudden cooling of steel in tempering may be compared to that of hammering in other respects. Thus the more sudden the cooling the greater is the force with which the particles are brought together, and the greater would be the effect produced, according to M. CARON'S view, upon the steel. By making a great number of experiments in tempering steel in different liquids, at different temperatures, he has, indeed, ascertained that this is the case, and that the hardness and other characters communicated to steel by tempering are inversed proportionate to the time of cooling.

M. DEVILLE considers these results are consistent with those which he obtained some years ago in regard to sulphur and silicium, &c., which he found to be capable of existing in two entirely different physical conditions, and to have the power of communicating their particular condition to large quantities of other substances combined with them. He considers the carbon in steel and iron to act this part, and that other substances resembling carbon in this particular capability of assuming different conditions, would also be capable of converting iron into steel. Among such substances he considers nitrogen to be especially likely to be of importance. On the influence of nitrogen on the production of steel much has recently been done; and we purpose giving our readers a brief account of the results that have been arrived at.

The necessity for affording capitalists some protection from the heavy losses incurred through application for shares in companies whose capital is but partially subscribed beyond that which under the present law they possess, has frequently been pointed out in the columns of the MINING JOURNAL—the position of every applicant for shares in a public company now being such that he is liable to have the full nominal value of his shares applied to the payment of the preliminary expenses—there being no provision in the Act now in force to prevent a company with a nominal capital of 1,000,000*l.* commencing business when only 7*l.*, or even only 7*s.* or 7*d.*, has been subscribed; and assuming the preliminary expenses to amount to 1000*l.*, and the amount of capital subscribed to be 1000*l.*, there is nothing to prevent the subscribed capital being applied to the payment of the preliminary expenses, and business being commenced without a penny in hand. The existence of such a state of things inflicts the greatest injustice upon both creditors and shareholders, and, no doubt, prevents the development of many important enterprises, which only require the application of adequate capital to render them highly remunerative. It has, however, been decided by the full Court of Exchequer that such is the state of the law, and as the Barons very justly remarked—the shareholders must be supposed to know the contents of the articles they sign or authorise to be signed for them, and the present law has the advantage of permitting every company to frame laws of its own, and suited to its especial objects.

Hence the question arises, whether the capitalist has any power to protect himself, and yet connect himself with public companies. That there is some difficulty cannot be doubted, but inasmuch as capitalists are gradually becoming so disgusted with the injustice and annoyance to which they are subjected through the designs of promoters, that it will soon be difficult to obtain capital for any company however legitimate its objects may be, it is probable that capitalists will soon become wise enough to avoid all companies which do not give them some guarantee on the face of their prospectuses that business will not be commenced until at least one-half of the capital shall have been subscribed, and that in the event of that proportion not being subscribed within one month from the date of issuing the prospectus the deposits shall be returned in full to the applicants for shares. Such a statement in a company's prospectus would, doubtless, materially aid the promoters in obtaining the required capital, and at the same time would afford protection both to the public and to creditors.

We freely gave insertion last week to the letter of a correspondent signed "No Partisan," on the subject of Welsh and Cornish slates, in which he has, we think, not only mistaken our simple purpose, which was to lay down as a basis for reference certain geographical, geological, and other facts not too well known; but he has also evidently adopted a signature by no means calculated to convey a correct idea of his real interest in the question. "No Partisan" betrays an animus which the true seeker after truth will never be suspected of: but, instead of wasting words upon this, to us, very immaterial part of the subject, we will just consider how far the writer in question has attempted to impugn our statements. What he does not seek to controvert must be taken for granted, and we have not only not denied, but we have actually admitted what "No Partisan" makes a contention about—viz., the durability of the Delabole slate "when once securely placed on a roof." By inference, therefore, the writer in question admits the extreme brittleness, loss by breakage, indifferent split, and greater weight of the Cornish slates, and also that, being made across the grain they frequently break after being laid on the roof. And further, he does not seek to controvert any of the other facts stated by us as to the greater cost in all departments of working Cornish slate, as well as the want of railroads and safe harbours for shipping.

But above all this, and which includes every other argument which can be raised upon the subject, we invited any of our correspondents to furnish us with reliable statistics showing the annual produce and profit of any of the slate quarries of Devon or Cornwall. This is the great commercial question, embracing every other, and to this test of value all must eventually come, or be content to have their pretensions ignored. Our correspondents are all silent on this subject, and therefore it is vain to be energetic or eloquent on incidental and subordinate matters. Though the subjects treated of in this Journal are frequently scientific and deeply interesting, both to the students of art and nature, still, after all, we are a practical and commercial people, and the paying capabilities of every undertaking must be mainly considered; and it is our province, and we may add our duty, to guide those who look to us for counsel by fair and unbiassed statements on the various matters from time to time passing under our purview. And this we shall continue to do in the manner we conceive best suited to the dignity and independence of public journalists, not by adopting a spirit of narrow criticism, but by laying down unquestionable and broad principles, which may serve as landmarks for all time. Our correspondent is not, we think, exactly dealing in an ingenuous spirit when, by inuendo and question, and not by assertion, he would have it understood that in fifteen or sixteen years the Welsh slate laid on one side of Camberwell Church had so far become worthless as to render it necessary to re-lay that portion of the roof. We are inclined to believe, from the extremely "ingenious and sophistical" mode in which the insinuation is made, that the writer knows as well as we do the facts of the case, and, therefore, he hesitates to say that the Welsh slates had exhibited symptoms of decay, although that is the evident object of the inuendo. He knows, or ought at least to know as well as we do, that the Welsh slates on that roof were Bangor slates, and that there is not a more durable slate in the world, and that no change is perceptible in them after a century's exposure.

The writer knows as well as we do, or ought to know, that owing mainly to the shrinking of the timber, and to settlement on one side, the slates being screwed tightly to the rurlings, that the Welsh slates were broken to such an extent as to occasion partial re-laying, and that a great number of the Cornish slates were also broken from the same cause, though that side was not affected to the same extent. We can refer him to the slater who laid the roof for corroboration of our statement. But who ever heard that Welsh slates were as brittle as Cornish under the same circumstances? The insinuation was meant to convey the belief that the Welsh slates had decayed, not that they were broken by accident, for he states "the Welsh portion of the roof has been re-laid, whilst the Cornish part remains *perfect and sound.*" We do not think this exactly fair from a writer who is "No Partisan," and we hope our correspondents generally will not imitate his peculiar reticence in relation to the material facts on which his entire argument has been raised. The writer of the letter in question entertains no doubt whatever of the success of *any slate quarry in Cornwall* when properly situated or judiciously managed. Instead of a mere vague opinion on slate quarries in general, we recommend the writer to accept our invitation, and send us the figures, which we will publish, showing the produce and profit of any slate quarry in Devon or Cornwall.

THE WELSH MINERAL RAILWAYS, AND THE SOUTH WALES COAL FIELD.

In noticing the progress of various railway projects through Parliament, we stated that the mineral branches of the Carmarthen and Cardigan Railway were rejected by a committee of the House of Lords. These lines are, however, so intimately connected with the working of the western portion of the South Wales coal field as to require more than a passing observation.

At present, from the Swansea Valley to the extreme western limits of the coal measures, the only means of transit are the Llanelly and Llandilo Railway, which traverses the coal field from the port of Llanelly to its furthermost edge in the north, a little beyond Llandibie; and the Kidwelly Canal, which extends from Bury Port to Kidwelly, and goes several miles up the Gwendraeth Valley. Now, it is hardly necessary to state that this accommodation is wholly insufficient for the development of the minerals over so wide an area, rich in thick and valuable seams of coal and ironstone. Provision is being made to extend the Swansea Valley Railway to Dyvennock, and to connect it with the Llanelly and Llandilo Railway by throwing out a branch through one of the minor valleys. A line has also been commenced from Swansea to Pontyrdulais, on the Llanelly Railway. And, when these lines are completed, many places where coal is now landed in small quantities will be fully worked; but the coal field west of the Llanelly line is without a railway. Formerly there was a line called the Carmarthenshire Railway (the Act for which was obtained so long ago as 1802), which ran from Llanelly to Castell-y-Garreg, in the parish of Llanfihangel-Aberbythic. This line was worked until circumstances arose which compelled the proprietors to abandon it, and the powers have now lapsed. The road remains, and could be converted into an excellent tramway at a comparatively small cost. There is, however, no prospect of this being done, and the only means of transit for the whole of the Gwendraeth Valley is the Kidwelly Canal, which is not equal to the traffic from three collieries. This district, with seams of coal measuring in the aggregate about 100 ft., has scarcely been worked at all, and so long as it remains without a railway it will be impossible to work it with profit. The proprietors are, therefore, very anxious for a railway, and the No. 2 Bill of the Carmarthen and Cardigan Railway, which was thrown out by a Committee of the House of Lords a fortnight ago, was for a line up the valley as far as Pontyberem, running parallel with the canal, but so laid down as not to interfere with it in any way, and capable of extension to Mynydd Mawr. No. 1 bill, which was also rejected, was for a line to Mynydd-y-Garreg, the nearest outcrop of the carboniferous limestone to Kidwelly. These lines were intended to run into the South Wales Railway at Kidwelly, and would thus be in unbroken communication with Bury Port, Llanelly, and, in short, the whole railway system of the country. Merely, then, as ordinary mineral lines, they would develope the coal, iron, and limestone of the district; but they were called the mineral branches of the Carmarthen and Cardigan Railway; and, although they would not have formed a direct junction with that line, they were really its natural branches.

When the Carmarthen and Cardigan Railway was projected it was to convey into Cardiganshire and into the upper parts of Pembrokeshire and Carmarthenshire the coal and lime of the Gwendraeth, for all the districts named are entirely destitute of those minerals, which cannot be dispensed with either in agricultural or in mining operations. The line was then to have gone to the Gwendraeth through Llanddarog; but as the South Wales Company would save the making of about nine miles of railway, and answer every purpose, it was thought advisable to use the South Wales from Kidwelly to Carmarthen as the connecting link between the Carmarthen and Cardigan line and these branches. It will thus be clear to all who take the trouble to follow us in these remarks that the mineral branches would have been the principal sources of traffic for the Carmarthen and Cardigan line. No one who is not practically acquainted with the western counties of South Wales can form any adequate conception of the immense demand for coal and lime, particularly the latter, which is required in very large quantities for the cultivation of the damp, tenacious, clayey soil of the country, utterly unmanageable without large doses of lime frequently applied. Thousands of carts are employed during the whole of the summer in fetching lime at distances varying from 20 to 35 miles, at a cost per ton averaging 1*l.* 12*s.*; and if these branches were made lime could be procured at the various stations of the Carmarthen and Cardigan Railway at from 6*s.* to 9*s.* per ton. We have said nothing about the manufacture of iron in the Gwendraeth being suspended for want of railway communication, but enough has been advanced to demonstrate the necessity for these branches.

The Committee of Lords at once admitted the value of the lines, and at the same time they rejected the bills. We do not know why they did so, unless it was that Mr. Owen Bowen, the secretary of the Carmarthen and Cardigan Company, happens to be the sole proprietor of the Mynddy-Garreg lime quarries, and the largest shareholder in one of the Gwendraith collieries. It was proved beyond any doubt in committee that the canal cannot accommodate three collieries now at work on its banks; and, further, that the proprietors of several collieries and mineral ground were waiting for a railway, in order either to work the minerals themselves, or to lease them for others to work. But nothing can be done without a railway. And, again, that the Trimsarran Coal and Iron Works had been purchased by a company, who are about to resume the old works, and that their extent would depend on the means afforded for the carriage of minerals. This was not all, for it was shown that the valley is divided by a ridge separating the outcrop of the coal field into two parts, each of them having about 50 feet of coal; and that the canal, assuming that it is equal to the traffic, could only accommodate the lower part; while the railway, taking a higher level, would accommodate the upper part.

The cross-examination of the witnesses by the counsel who represented the Canal Company and Lord Dynevor, the only opponents who were heard, was directed to the finances of the company, but nothing new was elicited. There were some discrepancies between the returns of the Board of Trade and the published accounts of the company, which were explained to have arisen from the blank forms supplied by the Board to the company not being sufficiently comprehensive. Much stress was also laid upon the amount already spent in the construction of the seven miles of the main line now worked, which was represented as exceeding a quarter of a million sterling; but there was a good deal of unfairness in this, as all the heavy and costly works upon the main line are completed, and what remains to be done up to Llandissil is mere surface work. Besides, the company have been embarrassed from a variety of local circumstances, which we cannot notice here, but we know that very few lines have met with so many difficulties; and it is remarkable that the directors and their subordinates have had sufficient courage to struggle with them. These difficulties, many of them perversely thrust in the way of the company by interested persons, have increased the cost of the line; but the capital expended is not so large as to exclude the prospect of a dividend when the line, with its mineral branches, is finished. It is a thousand pities that the work has been delayed. Arrangements are, however, being made to lay down a tramway over the route marked out for the lime line to accommodate the traffic until it shall please Parliament to give the required powers for the construction of a railroad. We believe these lines will be proceeded with again next year, and under an independent company there is no fear that they will succeed. There are some other points in connection with this line, as affecting the development of minerals, which we intended to notice; but as our space will not admit of it in this week's Journal, we shall reserve them until we refer at some length, as we contemplate doing in a few weeks, to the iron and coal in the Gwendraeth and Cwmamman valleys.

ROTATORY ENGINES.—Some improvements in rotatory engines have been provisionally specified by Mr. Harpur Jordan, of Southampton. The steam cylinder has within it another cylinder or enlargement of the shaft, which is of less diameter than the steam cylinder. The centre of the inner cylinder is eccentric to that of the steam cylinder, and the periphery of this inner cylinder is arranged constantly to touch the steam cylinder at one point. The driving shaft of the engine is in the centre of the inner cylinder, and the inner cylinder forms an enlargement of that part of the shaft which is within the steam cylinder. The driving shaft works through the covers of the steam cylinder. Through the inner cylinder a slot is formed, within which two sliding pistons are applied, which are capable of motion independently of each other. On the inner surface of each of the end covers of the steam cylinder is a groove or track, concentric with the centre of the steam cylinder, in which groove pins or projections on the ends of the pistons work, and the pistons are thus caused to slide into and out from the slot formed through the inner cylinder, as such pistons are acted upon by the steam. To provide for one piston working at full pressure, whilst the other works expansively, he provides a steam port on each side of the line of contact of the inner cylinder with the steam cylinder; one of these ports is constantly the supply, and the other the exhaust port; this may, of course, be changed by a suitable slide valve. By these arrangements so soon as either of the pistons passes the steam port it will shut off the communication between the steam port and the other piston, when the full pressure of the steam will for a time be upon the piston which has last passed the steam port, while the steam between this and the other piston will act expansively on the larger area of the other piston. The piston and other parts are to be suitably packed, in order that the same may be rendered steam-tight.

FOREIGN MINING AND METALLURGY.

Several interesting items of intelligence may be noted with respect to the coal and iron trades of France and Belgium. With regard first to the last-named country, M. Dupont de Fayt has re-lighted the Bois d'Haine blast-furnace, which is being worked for the production of casting-pig, replacing in some degree, in the consumption of Belgium, the blast-furnace recently extinguished by Messrs. Cambier and Co., at La Louvière. At Liége the demand for merchants' iron and plates has slightly improved; no variation is noted in pig. The increased and increasing use of foreign minerals in connection with the production of iron in Belgium is shown by the fact that in the first quarter of 1863 the importations made into the Luxembourg amounted to 36,000 tons, as compared with 15,000 tons in the corresponding period of 1862, the importation into the Limbourg also advancing from 60 tons in the first three months of 1862 to 3000 tons in the first three months of 1863. In the Charleroi district negociations are said to be pending with Spain for new contracts for rails, estimated as likely to amount to 6000 or 7000 tons, while tenders for rather an important quantity are expected to be shortly invited by the Northern of France Railway Company. Switzerland has, besides, supplied some fair orders for merchants' iron. The demand for all descriptions of coal required for manufacturing purposes continues good, but it has been much reduced by the mildness of the winter, so far as domestic consumption is concerned. Rich coal continues in good demand, and, although the production is much increased, industry still finds its wants supplied with difficulty. There is rather a scarcity of labour just now in the Charleroi basin, as many of the miners observing at the end of the winter that the aspect of affairs was not very encouraging, resumed the trade of brick-making, while others (these latter being principally Flemings) reverted to agricultural pursuits. As business has not been depressed—at any rate, to the extent which was anticipated—there is now rather an urgent want felt of the services of these missing men. At St. Dizier little has occurred calling for serious notice during the last few days, and the state of metallurgy in the Haute-Marne is depicted generally in rather gloomy terms. Speculation has not been observable for some time, and ordinary buyers are acting with reserve, calculating, perhaps, on a still greater depreciation in prices, which is, however, scarcely admissible at the point to which quotations have fallen. As regards railway affairs, there are some symptoms of animation, and the deliveries for which the great companies are about to let contracts will give a stimulus to industrial operations. Pig is neglected at present in the Haute-Marne group, iron is not much in demand, and a slackening in the production is remarked in almost all the works. Rolled iron, derived from wood-produced pig, has been quoted at 9*l.* 4*s.* per ton; mixed ditto, 8*l.* 12*s.*; hammered iron, 10*l.* 8*s.* to 10*l.* 16*s.*, and machine, 10*l.* to 10*l.* 8*s.* per ton, according to numbers. A station for goods has just been opened at Froncles, principally to accommodate the forges of M. Bonnecase, which have undergone many important changes of late years at the hands of that "industrial" who has introduced the fabrication of plates into the Haute-Marne. The amelioration noted in the Moselle group is confirmed; orders continue to arrive at the works, and the circumstance is accepted as a favourable augury also for those of St. Dizier and the Haute-Marne. It is stated, with reference to contracts for rails, which the great railway companies are about to let, that two of them will follow the system adopted in Belgium, of making the contractor the deliverer also of the small *matériel* required in connection with the laying of way. The administrations of the companies will, also, there is little doubt, invite English and Belgian ironmasters to compete at the adjudication with French producers. The mechanical establishment carrying on business under the title of the Société Nouvelle des Forges et Chantiers de la Méditerranée has just reported progress in respect to the exercise of 1862. It appears that the profits realised during the year amounted to 64,556*l.*, out of which the directors recommended and carried a dividend at the rate of 3*l.* 12*s.* per share, leaving a balance of 6960*l.* to be placed to the credit of 1863. It was stated that the operations of the undertaking continue to acquire a considerable extension; and as additional capital may be required, the directors were authorised to issue obligations to the extent of 120,000*l.*, should this measure be deemed necessary or advisable in the interest of the company. The Ougrée Collieries and Blast-Furnaces Company has made some important discoveries in the south of the Seraing basin, which now presents a geological phenomenon which has attracted much attention among coal-workers and *savants*. So long since as 1843, M. Albert Behr expressed an opinion that the coal earth extends here under the earth of the most ancient formation; and works lately carried out at the Ougrée Colliery have completely verified this prediction. The coal earth now reached below the ancient formations attains even proportions which had not been hitherto observed in any of the neighbouring basins. The subterranean extent of the coal earth appears, in fact, to increase with the depth, the plane of contact of the coal and Eifélian systems being inclined at least 40° degrees. They bear one over the other in discordant stratification, the most ancient system having been heaped over the other by a violent action subsequent to the original deposit. The discovery is, of course, one of great interest in connection with the Seraing basin, as it greatly augments its coal wealth towards the south.

With respect to the foreign metal markets, no transaction of importance has been concluded in copper during the last few days at Havre. Paris has remained without change and without much business in the same metal; Lake Superior was last quoted 102*l.*, and Chilian, 100*l.* per ton. At Cologne the article has not been much sought after, and prices have remained unchanged. At Berlin there has been rather more demand, and prices have been firmly supported. Hamburg has been calm, with limited purchases, to meet consumptive requirements. Tin has been almost completely neglected by speculation; business in the article is in rather a languishing state, and a certain feebleness in prices has resulted. At Amsterdam and Rotterdam, Banca has been obtainable at 76¼ fls. Quotations have been maintained as follows at Paris:—Banca, 134*l.* 12*s.*; English, 120*l.*; Detroit, 130*l.*; and Billiton, 132*l.* per ton. The demand for the article leaves much to be desired on the German markets; at Cologne, prices are almost nominal. At Hamburg also tin has been somewhat feebly held. There has been some activity in the demand for lead at Paris; rough French is maintained at 22*l.* to 22*l.* 8*s.*; rolled, at 25*l.* 4*s.*; and old lead at 19*l.* 12*s.* per ton. At Rotterdam, Stolberg has found a good outlet at 12 fls. Havre has remained without business. Affairs at Hamburg have been on a rather limited scale, nevertheless, in consequence of the want of stock, and the "tolerably favourable"—we should consider them, having reference to the fearful consequences which they involve, the decidedly unfavourable—advices from New York, the article is held very firmly. Berlin has also been firm, the demand for lead on consumptive account being good. Previous rates have been maintained on the various other continental markets. In zinc a revival of activity appears to be anticipated, and prices indicate more firmness. Former rates have been firmly supported at Paris, rough Silesian being quoted 19*l.* 4*s.*, and rolled, 22*l.* to 22*l.* 16*s.* per ton. More demand has prevailed of late at Hamburg, and some hundreds of quintals have found purchasers on that market. At Berlin the article has remained calm.

We gave last week some rather voluminous details with respect to the operations of the Vieille-Montagne Company in 1862, but some further particulars remain to be added. The three collieries which the company possess in the basin of the Meuse yielded last year a production of 92,958 tons, out of a total of 182,263 tons, forming the general consumption in the establishments of the company. The successive reductions which for several years past the prices of coal in the Liége and Ruhr basins have experienced has been a favourable circumstance for the company's metallurgical establishments, but could not occur without, of course, occasioning a loss, so far as its Belgian collieries were concerned. Comparing the state of things which prevailed, however, in 1853 with that which obtained last year, it will be seen that the loss sustained is of little importance, and finds a large compensation in the reduction in the price of the coal purchased. The production of rough zinc by the company last year amounted to 23,875 tons; this is a total a little below that of the preceding exercise, but the conditions as to cost price have been satisfactory. The administration has made this diminution of production coincide with the reduction which appeared in the company's general sales of zinc, which amounted in 1862 to 26,884 tons, or 4029 tons less than those of the preceding year. This diminution in the sales is attributable entirely to the French market, in which it is noticed that the impetus derived for several years by building operations has materially slackened, a state of affairs occasioned, no doubt, by the general depression occasioned last year in Europe by the American war. Notwithstanding this state of affairs, the total sales effected by the company in 1862 exceeded, it will be noticed, the production of the year; and the administration provided for this by reducing the general stocks of manufactured products, and by purchases of zinc made when it has been considered to the interest of the company to effect them. The sales have been made on terms as remunerative as those of the preceding exercise, but the falling off in the quantity sold has had its inevitable influence on the total of the rough profits realised. The company's great establishment in Sweden continued to receive last year developments necessitated by the large basis on which it has been created. The mines are in course of regular working; a zone of more than 1600 ft. of galleries has been opened for clearing purposes, and 18,000 tons of rough minerals had already been extracted to the close of 1862. A railway, 6¾ miles in length, which unites the mines to the preparation establishment, will be definitively opened for traffic next month (June). The roasting-works commenced last year will be completed in the course of this season. The washing-works have entered upon their career of production; a first delivery of 500 tons of minerals has been made to the works in Belgium and Prussia, and their treatment has given entire satisfaction. On the whole, the Swedish establishment has arrived at the period when it will begin to yield results; and if the high prices during the prevalence of which its creation was determined on no longer prevail, the administration hopes, nevertheless, for remunerative results, which will become still more encouraging under more favourable circumstances. The administration, before dismissing this department of its operations, pays a high compliment in its report to "the intelligence, activity, and persevering energy of its engineer-director, M. Schwarzman, as well as to the devotion of the staff under his orders."

The production of lead in Prussia—for we have not yet cleared off the data at hand in reference to mining and metallurgy in that important kingdom—continued to increase in 1861. In that year it amounted to 18,177 tons, of the value of 319,189*l.*, as compared with 15,605 tons, of the value of 295,153*l.*, showing an increase of 2572 tons, or 16½ per cent. in the quantity, and 24,036*l.*, or about 9 per cent., in the value in 1861. Prices were maintained in 1861 at about 16*l.* to 19*l.* 4*s.* per ton on the Cologne market. On the right bank of the Rhine there are some works which employ a combined treatment, enabling them to obtain copper independently of silver and lead. These establishments, to the number of six—Ramsbeck, Loh, Rothenbach, Musen, Victorhutte, and Niederfischbach—produced in 1861, 2921 tons of merchants lead, 1142 tons of litharge, 10,313 lbs. of silver, and 95 tons of copper, of a total value of 125,296*l.* The production was less than that of 1860, in consequence of the closing of two works, Honef and Wildberg. On the left bank of the Rhine are eight works, situated near Stolberg, in the Eifel, and near St. Goar; these produced 13,723 tons of lead, 15 tons of litharge, and 7719 lbs. of silver, of a total value of 289,708*l.* There exist, also, some works in the regency of Oppeln (Silesia), and in the regency of Merseburg (Saxony), but they have not much importance; they delivered, in 1861, 1421 tons of lead, and 1250 tons of litharge, of a total value of 46,097*l.* The production of rolled lead in Prussia, in 1861, was only 72 tons, of which the Ilsenburg Company alone manufactured two-thirds. Lead minerals are spread with tolerable abundance over the whole Prussian territory, but the two richest districts are those of Arnsberg and Aix-la-Chapelle. Annexed are particulars showing the extent to which the working was carried in 1861:—

	1861.	1860.
Number of mines	169	138
Minerals extracted	Tons 47,321	Tons 44,747
Value	£359,173	£349,973
Value per ton	£7 8*s.* 9*d.*	£7 16*s.*

The copper works of Prussia carried on their operations with great activity in 1861, and

produced 2273 tons, of the value of 217,559*l.*, as compared with 1964 tons, of the value of 199,864*l.* in 1860. Prices on the Cologne market ranged from 92*l.* 16s. to 102*l.* per ton in 1861. The production of 1861 may be analyzed as follows:—

	No. of works.	Quantity.	Value.
Molten copper	10	Tons 2273	£217,559
Worked copper	24	1528	178,424
Brass	50	1748	172,909

The principal centre of Prussian copper metallurgy is the regency of Mersburg, in Saxony, where the greater part of the works which deliver rough copper are situated. They work the very abundant minerals of the district. With respect to minerals, it may be interesting to note that the number of mines worked in 1861 was 135, yielding 94,904 tons, as compared with 59, yielding 36,031 tons, in 1860. The great difference in the number of mines returned in 1861, as compared with 1860, arises from the fact that in 1861 all the mines which furnished copper minerals, even as an accessory product, were included in the enumeration.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MAY 21.—We have no particular change to report respecting the state of the Coal Trade here this week; complaints of dulness are still common enough, and notwithstanding the liberal scale on which the foreign exports have been of late, still the trade is not sufficient to keep the large steam coal collieries in full employment. The consequence is that at many of those works large heaps are accumulating, the coals being laid down in order to keep the works going about four days per week. The Iron Trade continues pretty good, but prices low. The prices quoted at Middlesborough at present are (that is, May 14)—No. 1, 51s. per ton; No. 2, 48s. per ton; No. 3, 46s. per ton; No. 4, forge iron and mottled, 45s. per ton; white, 44s. per ton; refined metal, 61s. 6d. per ton, nett cash; four months' bill, 1s. extra. The iron trade is certainly much more buoyant than the coal trade, although engine works and manufactories are many of them somewhat dull. At the Birtley Ironworks, near Gateshead, much activity prevails; there are blast furnaces here, and also foundries, &c., and connected with the works are the old and prosperous coalworks at Ouston. All these works are exceedingly active; and owing mainly to the activity and public spirit of Mr. Hunt, the managing owner, who resides on the spot, and takes great interest in the works, and also in the welfare of the inhabitants of Birtley and neighbourhood, the old dwellings for the workmen and others are rapidly disappearing, and good substantial and handsome buildings rising in their stead. The extensions and improvements in the village have indeed been extraordinary of late; a handsome church has been built, and also large school-rooms, with house for the teacher. A Mechanics' Institute has been founded, and is now in a flourishing state.

The exports during the last week from the Tyne were—45,063 tons of coal, 1151 tons of coke, 11,410 cwts. of iron, and 10,063 cwts. of alkali. There was an increase last week in the shipments of coal of 15,762 tons; alkali, 1511 cwts.; and a decrease in the shipments of coke of 1642 tons; iron, 19,213 cwts.

On Monday, the wire rope used for winding coal at St. Hilda's Pit, South Shields, suddenly broke, two full tubs being brought up at the time. Some damage was caused to the apparatus in the shaft, the cage and tubs being precipitated to the bottom, but fortunately none of the workmen were injured, and the damage, which was only trifling, has since been repaired.

A rather curious circumstance occurred last week at the Mount Moor Colliery, on the Black Fell. This is an old colliery, which has been worked in various seams with little intermission the last fifty years. It has, however, lately stopped working, but the ventilation of the workings has still been kept up by means of a furnace in the Maudlin seam. One of the men engaged at this furnace, named Thomas Brown, went down the pit on Thursday morning last to attend to it, and was left there by the man he relieved; when this man returned to relieve T. Brown, he was not there, but on the seat near the furnace he found his watch and knife, and part of his victuals, he having evidently consumed part of the latter before leaving. The furnace was still burning, but the fire was very low. This man went in search of the missing furnace-man, but failed in finding any trace of him, when he of course gave the alarm to the persons in charge. A party of men and officers descended and commenced the search for him, but this proved unavailing, although great exertions were made, by relays of men, until Monday morning last, at seven o'clock, when he was found in a remote part of the workings, near an old shaft, he having been then ninety-eight hours in the mine, and ninety-three hours without food or drink. The only sustenance he had got during this time was the oil from his lamp, which he had sucked up [and he had also had recourse to his urine]. Although a good deal exhausted when found, he soon revived, and after a little food, &c., had been administered, he walked home with little assistance. His preservation, however, appears extraordinary, especially when it is considered that choke-damp is sometimes found in these old workings, and his case ought to be a warning to workmen, who are so often proved to be reckless and foolhardy. It appears that he had left his post, which was very improper as well as dangerous, to look for a slope drift, which he had been told passed up from the Maudlin seam into the Higher seam through the main coal, and his light having been extinguished he was soon entirely lost and bewildered, and was at length found as described above, after a search of nearly four days. The only reason for his looking for this drift was idle curiosity, he having no concern in the matter whatever, and to gratify this he neglected his furnace and nearly lost his life.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

MAY 21.—A gloomy prospect still hangs over the Iron Trade in these counties, and there is little probability of an early improvement. We have to notice the blowing out of several stacks, owing to the continued depression in trade. There is a continued falling off in the enquiry for bars for the home market, and merchants seem to confine their orders to meet immediate requirements. We have a better enquiry for railway ironwork, but, as this department of the trade is carried out at only a portion of the works, the activity is kept within the houses in which the rails are manufactured. Sheffield has, of late years, created an iron trade we may almost describe as peculiarly its own, and it is remarkable to note the activity which has marked its progress, whilst other departments of the iron trade have been depressed for a long period. We refer to the manufacture of armour-plates by Messrs. J. Brown and Co., and to the heavy castings which have lately been executed at the Midland Ironworks. The latest work of extraordinary size was the anvil which is intended for a large Nasmyth's steam-hammer, to be used in beating homogeneous metal for the Whitworth and Armstrong guns. The amount of labour which these works alone have provided for Sheffield artizans has had great effect in providing work for a portion of the working population of Sheffield. We have also to notice the introduction of a new process for the manufacture of scissors by M. Simmolet, a Frenchman, which is likely to revolutionise a portion of the cutlery trade. Hitherto the manufacture of scissors has been by hand, but M. Simmolet has invented a steam-hammer especially for this work, which promises greatly to cheapen their production.

In the Coal Trade we regret to report a further depression, which has rendered it imperative by many coalmasters to materially lessen the rate of production. At some of the works there is little more than a third of the week occupied by the colliers in labour, whilst at others, and some of the largest collieries, the men are only working three days per week. There is a probability of an exceedingly dull summer trade, unless there should be an immediate improvement in the manufacturing interest of the country, which is exceedingly improbable. There is great competition for orders, and some of the smaller coalmasters have reduced their rates.

It is intended, when the new line of railway is opened, which is expected next month, to proceed with the development of several lead mines in the Peak of Derbyshire. A company of gentlemen is being formed for that purpose.

On Monday an influential meeting was held at Tideswell, to re-organise the Portaway Lead Mining Company, and to adopt such measures as would best promote the interests of the company. After a discussion, it was determined to sink a new shaft on an eligible part of the mine, in order to get down to the vein with the least possible delay.

With the view to promote the means of transit of coal from the South Yorkshire district, the Midland have concluded an arrangement on advantageous terms with the Manchester, Sheffield, and Lincolnshire Railway, which has prevented any opposition to their proposed line from Barnsley to Cudworth, which will afford railway accommodation direct to the town of Barnsley, on the Midland route.

The applications for New Patents include—Mr. John Patterson, of Beverly, for apparatus for grinding, cleaning, and hulling various kinds of farm or vegetable produce, also applicable to the crushing of minerals and other substances; Messrs. Waddington, of Thornton-road, Bradford, for improvements in combs for combing wool by machinery; Mr. T. C. Stretton, of Old Basford, for machinery or apparatus employed in the dressing of lace or other fabrics; Mr. J. Whitehead, of Calverly, for motive-power machinery, especially adapted for raising and forcing water and other liquids or fluids, parts of said improvements being applicable to steam-engines and other machines fitted with pistons; Mr. H. Bennett, of Wombridge Ironworks, for apparatus or mechanism to be used for facilitating the puddling of iron.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MAY 21.—The Iron Trade keeps quiet, but nearly all producers of a good quality are doing a fair trade, having few orders in hand, but receiving enough to keep them in pretty full operation. The most active demand is for hoops and sheets. Makers of inferior iron are slack, and must be. South Staffordshire has no chance of competing in the production of cheap iron, nor has North Staffordshire very much. At this moment Cleveland pig-iron is coming here, bearing the carriage, which is about 11s. per ton, and selling for use as a mixture in the production of manufactured iron. It is plain that as mills and forges are erected in Yorkshire and Durham, with the advantage of getting the raw material cheaper, Staffordshire must find it increasingly difficult to compete, except in the production of the higher priced irons. Nay, further, it is a fact that rails are being rolled in South Wales out of Cleveland pigs! The statement seems almost incredible, but the authority on which it is made is unquestionable.

The Puddlers' Strike is not yet over, and in truth its dimensions appear to be increasing. Last week some of the men returned to work at Messrs. Downs's, but they have since left. A great deal of violence has been used by the promoters of the strike, and the men who resumed work last week at the above works state that they dare not continue. In some cases men have been conveyed to gaol for assaulting and intimidating those who desired to return to work, and others are in custody. Some of the men who are out have gone to other districts; in fact, it is the higher wages given in Durham and near Sheffield that have led to the demand, which the ironmasters here, receiving low prices for iron, and paying very high rates for ore, are not in a position to grant. The position is certainly getting more serious. The strike is exercising an adverse influence on the coal trade, which must be pronounced dull, especially that part of it which depends on the ironworks.

A youth named Patrick Welch was killed at a colliery near Walsall, belonging to Mr. Highway, on Friday evening. The result of an investigation before the coroner proves that the youth was ascending the shaft in a skip, with several other persons, and when the skip was about 4 ft. above the ground the engine was stopped. The under banksman then proceeded to push the wagon over the mouth of the shaft, but before it had got across the engineman lowered the skip, and the banksman then began to withdraw the wagon, which, however, was caught by the skip, and the boy was knocked out, and falling to the bottom was killed. It was suggested that the youth was stepping out at the time, but this was not clear. The engineman stated that when he stopped his engine he supposed that the skip was a yard above the surface; but, seeing that it was only just above it, he shouted to the banksman not to push over the wagon, and proceeded to lower the skip, with a view to raise it again, as from a defect in the chain he could not raise it higher without having previously lowered it, so as to change the centre. When he stopped the engine the skip should have been higher, but the chain varied in the rings. There was an indicator on the engine, but at the time of the accident there was no finger on it. It had been set right since the accident.

In answer to a juror, he said there were about 6 feet of woods out of the chain in various places, and this altered its length about 2 ft. 6 in.; and he also acknowledged that in consequence of the woods, which connect the triple links, being out of the chain it sometimes slipped. In answer to Mr. Baker, the Government Inspector, he said that about a fortnight before the accident he told the doggy that the chain was defective, and it appeared that some of the miners had also complained. The banksman and the under banksman deposed that they did not hear the engineman shout to them not to push over the wagon, but a man who was nearer the engine at the time said he heard him. One witness said, in reply to Mr. Baker, that on one occasion recently, when the men were going down, the skip jerked 2 ft. or more, owing to the absence of "woods" in the chain. All the men complained of the chain, and in reply were told by the doggy they were not compelled to work, but that a new chain was sent for. In summing up the evidence, Mr. Hooper, the coroner, said blame seemed to rest upon those whose duty it was to inspect the machinery, as it seemed quite clear that the chain and indicator had been allowed to be used while in an imperfect condition. Another matter calling for censure, was that the complaints of the men as to the chain had been disregarded. It might be stated, without much fear of being wrong, that the condition of this chain led to the loss of the boy's life, inasmuch as it misled the engineer, and it was something little short of a miracle that the other persons in the skip were not killed at the same time. Mr. Baker observed that it was a matter for regret that safety-chains was not more generally used, and alluded to the fact that this was the second instance of loss of life in this neighbourhood within a short period that might have been prevented by their adoption.

The jury, after a short deliberation, returned a verdict of "Accidental Death."

At the Dunkirk Mill Colliery, near Great's Green, of Messrs. Warden and Hartland, the firm have for some weeks past been sinking their pumping-pit, and a little above the top of the bottom coal the sinkers have come upon the finest specimen of the fossil tree of the carboniferous period hitherto discovered in this district. The fossil in all probability belongs to the genus *Knoira*, and the portion *in situ* measures 14 ft. 8 in. in height, and about 3 ft. 3 in. in diameter at the root, and about 2 ft. in diameter at the upper extremity. It is beautifully marked with the typical character of that genus, is in the highest state of preservation, and is almost a counterpart (except the seal-like markings) of the Sigillaria figured in Dr. Buckland's "Bridgewater Treatise." The position it occupies in the pit shaft is quite erect, and the upper portion is embedded in blue shale, in which the shaft is sunk, and, no doubt, will be traceable upwards, and hopes may be entertained of developing that termination. The surrounding shale in which it is embedded is full of ferns and sedge-like looking plants. There is no doubt but it grew upon the spot where it now stands, which is at a depth from the surface of 250 yards. From the immense weight of the tree—about 7 or 8 tons—it will require an expense of about 10*l.* in labour to remove it from its bed. This being provided for, Mr. Hartland has liberally promised to find tackle and machinery to remove it to the surface, and cartage to the Museum of the Dudley and Midland Geological Society gratis.

REPORT FROM MONMOUTH AND SOUTH WALES.

MAY 21.—Complaints are being made again of the scarcity of vessels, and the Cardiff coalmasters, more especially, find considerable difficulty in executing their orders. Many of the collieries are, in consequence, only partially employed, but it is expected that this will not continue long, as a few days of fair wind will be certain to bring a large number of vessels to the various ports. The demand continues about the same as what has been the case for the last eight or ten weeks, and there is no change to report in prices. Judging from present indications, I do not think that there is any probability of an immediate advance in quotations; and, if the demand should become more active, the collieries at present working can, by a very short notice, materially increase their output. The ironworks continue pretty regularly employed, and the trade is in a moderately active state. The chief ironmasters have a good many orders on the books, but the smaller works are not quite so well off. Quotations remain without alteration, with a drooping tendency. The opening of the Marshfield Ironworks, Llanelly, will give employment to a large number of hands, and the neighbourhood promises to become no unimportant iron-making district before many years are over. The furnace which was recently blown-out at Gadlys is in course of being rebuilt, and it will be lighted again as soon as possible. If a correspondent of one of the local papers is to be relied upon, there is evidently a good time in store for the eastern part of this district. The correspondent referred to states that Messrs. Brassey and Co. are about resuming work at Pontnewynydd, near Pontypool, that the Pontnewynydd Tinworks are to go on without delay, that a large contract has been secured by the proprietor of the Risca Collieries, and that the Cwmbran forge has been taken. Some weeks since I mentioned in my report that Messrs. Weston and Grice were in treaty for the Cwmbran Forge, and I understand from good authority that the matter has not yet been completed. As to the other pleasing announcements, it is to be hoped that they will turn out to be correct.

The emigration continues, more especially from the ironworks. Batches of ten, twenty, and thirty families leave together, and whole streets of houses are vacant in many of the towns on the hills. Generally speaking, the emigrants have either connections or friends in the countries where they propose to go, who have in numerous instances sent them the means to leave this country, and have secured employment for them against their arrival. The latest communications which have been received from America show that there is a great scarcity of hands in nearly every branch of industry, and employment is readily obtained at high wages.

The Neath and Swansea magistrates have just decided two important cases in connection with the working of collieries. At Neath, on Friday, Phillip Thomas, proprietor of a small colliery at Llansamlet, was summoned by Mr. Thomas Evans, Government Inspector of Mines for the South Wales district, for permitting his daughter to work in the colliery on April 30, contrary to the provisions of the Act of Parliament. Mr. Evans passed the colliery on the day named, and saw the defendant's daughter, who had only just come out of the colliery. She told the Inspector that she had been filling coals. The defendant called his brother as well as the daughter, who positively denied that she had been working underground. Her work was to pick slags, and sell coal on the surface. The magistrates expressed their disbelief in the statements of defendant's witnesses, and find him 5*l.* Mr. Simons, who appeared for Mr. Evans, said the latter was entitled to half the fine, and he wished his moiety to be applied to any charitable institution which the magistrates might recommend.

At the Bristol Bankruptcy Court, on Tuesday, the last examination and discharge sitting in *re* W. Harris, Rhydfelen, colliery proprietor, was held. Mr. Press appeared for Mr. Henry Britton, Crown solicitor, and Mr. Harris for the bankrupt, in the absence of Mr. Trenerry. In reply to questions put by the Commissioner and Mr. Press, the bankrupt said Mr. C. Davies, of Pontypool, sued him for 120*l.* on an I. O. U. He instructed Mr. Trenerry to put in an appearance to the writ, and he also told that gentleman to put in an appearance to a claim for 236*l.* 6s. 9d. He did not know whether judgment had been issued on that amount. Mr. Press produced the judgment paper, dated March 19, being three days after the bankruptcy took place. His object was to show that there had been a vexatious defence to the actions. Bankrupt further stated that he paid Mr. Trenerry 62*l.* 2s. 6d. to carry on the defence. He sold everything he had to get this money. In reply to Mr. Harris, the bankrupt said he had never been asked for the 120*l.* before the action was brought. The money was due to him, and he gave the I. O. U. as an acknowledgement. When he instructed Mr. Trenerry he considered he had a good defence. Mr. Press remarked that his object was not so much to oppose the bankrupt as to obtain information, with a view of getting the 62*l.* paid to Mr. Trenerry repaid into the estate. Mr. Harris said Mr. Trenerry would readily render an account. The sitting was adjourned, in order that Mr. Trenerry might be communicated with.

At the last meeting of the Newport Harbour Commissioners the decrease in the shipping visiting the port was the subject of an interesting discussion, and Mr. Batchelor suggested the desirability of the Commissioners purchasing the docks from the present company. Mr. Knapp, and several other members, expressed their hearty concurrence in the suggestion, and the matter is to be taken into consideration at the June meeting. Swansea, and many other ports, have adopted a similar plan with success, and the proposition, it appears, is looked upon with great favour at Newport.

The arrivals at Swansea include the—Mary Fanny, from Hamburg, with 150 tons of spelter, for Grenfell and Sons; Dorsetshire, from Cuba, 484 tons of copper ore, and 79 tons of copper regulus, for the Cobre Mining Company; Groce Piele, from Chanaral, 470 tons of copper ore, and 22 tons of silver regulus, for Henry Bath and Sons; Ealing Grove, from the Cape of Good Hope, 400 tons of copper ore, for Henry Bath and Sons; Georgina Grenfell, from Pan de Azucar, 89 tons of copper regulus, and 150 tons of copper ore from Caldera, for H. Bath and Sons; 290 tons of copper ore from Chanaral, for Richardson and Co.; and 180 tons of copper ore from Pan de Azucar, for ditto; Golondrina, from Chanaral, 695 tons of copper ore, for Richardson and Co.; Agenoria, from Aveiro, 100 tons of copper ore, and 35 tons of lead ore, for Richardson and Co.; Bonne Amelie, from Bilbos, 170 tons of iron ore, for Richard Cowell; St. Julien, from Aveiro, 150 tons of copper ore, for John Taylor and J. Tilliers; Swansea, from Caldera, 280 tons of copper regulus, 200 tons of copper ore, and 20 tons of silver ore, for Henry Bath and Sons.

SWANSEA.—Our Swansea correspondent writes (May 20):—The general trade of the district is at present suffering from depression, if we except some of the largest of the works, which, on the whole, continue to have their share of business. With some of the smaller adventures, however, it has been for some time past a struggle. The bankruptcy of Mr. Hunter, proprietor of the Landore Chemical Works, is the prevailing topic among commercial men of the third degree, and assertions are openly made that are anything but complimentary to the bankrupt, or the way in which the catastrophe was brought about. The sum of 14,000*l.* or 15,000*l.* is mentioned as the probable amount of liabilities, and when it is known that his trade bills had been persistently refused by the more substantial banking establishments of the district for some time past, the wonder is how so large a sum could have been realised to his credit. Complaints are made of large orders given on account of the bankrupt, the execution of which so closely preceded the announcement of the insolvency as to lead to unfavourable comment. Yesterday the proprietor of another small tinworks at Landore attempted to commit suicide, by stabbing himself, the depression of trade being assigned as the cause of the rash act. Since my last, the Swansea branch of the Bank of Wales has been opened in their premises in Wind-street, under the management of Mr. Geo. Allen, formerly cashier at the Glamorganshire Bank. From the first the scheme has been very favourably regarded by commercial men, and there is every reason to expect successful results from its inauguration. The new bank cannot hope to step all at once into that high position of public confidence at present enjoyed, and deservedly so, by the two existing banks here—the Glamorganshire and the West of England, and more especially the former, which, under the really able management of Mr. Young, has secured a stability that is not likely soon to be touched. At the same time there is reason to anticipate that, with careful management, the newly-opened bank will secure its share of business and public confidence as the requirements for further banking facilities become greater, which is the case daily. Reverting to railway matters, the Swansea and Neath Railway is expected to be opened in the course of a month, and the Llanelly Extensions Line is in course of progress, under the contractors, Messrs. Watson and Overend. The completion of these undertakings will add much to the prosperity of the district.

THE COPPER SMOKE QUESTION.—It is a matter of world-wide notoriety that the districts of Swansea and Neath have, for nearly a century past, enjoyed almost a monopoly in the smelting and manufacture of copper; and not only so, many other mammoth establishments have sprung into existence, affording daily employment to tens of thousands, and being the means of annually expending an almost incredible amount of money amongst the labouring classes. There are some individuals who have lived all their lives in the very midst of the smoke, which is said to be so prejudicial to health and injurious to vegetation, and can look back some 60 or 70 years and well remember the righteous indignation which was called forth against the smelters and other manufacturers when their chimneys and factories first belched forth their volumes of smoke. Vexatious legal proceedings were then of ordinary occurrence and manufacturers had not only to encounter the difficulties and obstacles inherent in the establishment of a new business, but they had to stem the tide of popular opposition, and a most determined resistance on the part of the landed proprietors. Fortunately for the manufacturing districts of South Wales, the prejudices of our forefathers have long since expired, and the hill-sides in the immediate proximity of the works having been denuded, further resistance was prudently considered futile, and the copper and other manufacturers were permitted to come and settle on the banks of the various rivers, and unmolestedly pursue their occupations. As time rolled on, science and chemistry were brought to bear, and immense sums of money were expended in endeavouring to render innocuous the devastating effects of the smoke. Happily the results were most successful, and we believe we can assert, as a fact, that for the last three or four years the effects of the smoke has been confined to the limit which marked it some eight or ten years ago. This being the case, and the people of Swansea and Neath seeing the immense wealth and importance which accrued to them consequent upon the establishment of the gigantic works, cordially welcomed all fresh comers, and gladly opened their arms to any capitalist who would expend his money in still further developing the trade and commerce of the ports. There is no spot in the United Kingdom more suited for the erection of large manufactories than the common between Swansea and Neath, with railway facilities, with easy water carriage, and far removed from agricultural districts. A better site could not possibly be found, and, as we have before remarked, the various manufacturers have been cordially welcomed, and have for some years past enjoyed an immunity from vexatious legal proceedings, and been allowed to pursue "the even tenor of their ways," with some degree of peace. We very much fear, however, this quiet of past years is shortly to be broken; an ominous cloud gathers in the "north-east," and the manufacturers are about to be again interfered with, and unnecessarily annoyed. Mr. Nash Edwardes Vaughan, of Rheola, some six miles to the north of Neath, a most influential county gentleman, and a large landed proprietor, has issued an address to the "proprietors of land in the Vale of Neath," in which he says—"I am convinced that our properties in this valley are beginning to suffer from the effects of copper smoke, and that it is now exercising a baneful influence on the growth of trees." This being the case, he asks the various landed proprietors to meet him at the Castle Hotel, Neath, on Wednesday next, the 27th instant, for "the purpose of forming an association, and also of appointing a committee, who shall first urge on the various copper smelters to take those measures as science can point out to neutralise the poisonous qualities of their smoke; and in default of their undertaking to do so, to resort to such proceedings as may be advised to protect the hitherto fertile and beautiful district from destruction." Now, with all due deference to the abilities and foresight of Mr. Vaughan, we venture to say that he has here voluntarily undertaken a task for which but few people in the whole county will thank him. It is just possible that the closest and most powerful microscopic inspection may reveal the alarming and astonishing fact that a tree or two, situate in the midst of his park, are "beginning to show the effect of the copper smoke." We say such is just possible; but we would seriously ask Mr. Vaughan whether for this he would risk the very existence of those works which afford employment to so many thousands. There is no blinking the case. The copper works have for some time past been kept going at a nominal profit, and apparently there is no prospect of any substantial improvement. Legal prosecutions by a "regularly organised association," such as that contemplated, would be a serious thing at the present juncture; and we verily believe would cause some of the smaller works to suspend operations altogether. But not only so, we challenge Mr. Vaughan to prove that every known chemical means and appliances have not been tried to neutralise the poisonous effects of the smoke. Mr. Vaughan well knows that the late J. H. Vivian, M.P. (the father of the present firm of Vivian and Sons), expended many thousands of pounds in experiments; and every known remedy has since been applied, not only by the Messrs. Vivian, but by the Messrs. Foster, Williams, and Co.; the Messrs. Grenfell and Sons; and as well several other large smelters. And although, we grant not, altogether successful, the injurious effects of the smoke have been considerably mitigated, and confined to those limits long since denuded of vegetation. If Mr. Vaughan now wishes the various manufacturers to expend still larger sums in mere experiments to counteract a fancied evil to a few trees in his garden, then we say he is acting most arbitrarily, and not upon any principles which can be encouraged or defended, but simply for a selfish and personal end. We are really sorry to see Mr. Vaughan in so unenviable a position—to have placed himself forward as a champion in a fight which will only set the manufacturing and agricultural classes in antagonism, and can lead to no possible good. We cannot dispute that Mr. Vaughan has immense county influence, and we hope and trust sincerely that he will exert his influence in the development of trade and commerce, rather than in throwing serious obstacles in the way of those who have been so cordially welcomed, who provide employment for tens of thousands, and who have unquestionably made the ports of Swansea and Neath those prosperous places and busy marts of commerce which they at present are. In concluding, we cannot but allude to the very disastrous circumstances which the proceedings contemplated by Mr. Vaughan will have upon the whole of the collieries in the Swansea and Neath districts. Immense sums of money have been, and still are being, expended in affording proper railway communications, and thus opening up the mineral resources of the district. These collieries are worked at a profit simply from the fact that the copper works, the patent fuel works, and other large manufactories work up the small coal, and but for this we can state as a fact that several collieries would cease operations altogether, rendering a large amount of capital unremunerative, and throwing hundreds of colliers out of employ. The whole districts of Swansea and Neath are thus vitally interested in the question—their all is at stake. The inhabitants of South Wales emphatically "live by smoke," and cordially welcome all fresh comers. To drive the manufacturers away would not only be doing a serious injury to the workmen, would not only be unjust to the capitalists, but would cause the manufactories to be removed elsewhere—to districts where the devastating effects of the smoke could be more apparent and hurtful. We say again that all possible injury to vegetation in the neighbourhood of the Swansea and Neath works has long since been done, and, moreover, that the effects of the smoke is not now more visible than for the last eight or ten years. If, however, Mr. Vaughan fancies his trees suffer therefrom, let him take those means which, as a private gentleman, he has at his command; but we condemn in the strongest possible terms the organisation of a regular association, the formation of which means nothing more or less than vexatious legal proceedings, undertaken in a selfish spirit, and altogether irrespective of those fatal consequences to both manufacturers and workmen which we have pointed out.

IMPROVED MACHINERY FOR METALLIC RODS AND WIRE.—An invention has recently been provisionally specified by Mr. Michael Phillips, of Dewsall, near Hereford, according to which he proposes to take a cylinder or pipe 3 or 4 ft. long, bored internally to 2¼ in. diameter or thereabouts, in which a solid plunger or piston is worked either by hydraulic pressure or by means of crank or otherwise from any machinery. The cylinder is placed horizontally, and has much the appearance of an ordinary pump to a steam-engine. The plunger, if worked from machinery, travelling at the rate of from 12 to 15 strokes per minute, or quicker if required. At the other end of the cylinder to which the piston enters is a cap of hard cast-iron or steel, 6 to 8 in. long, fastened to the cylinder on the one side by a strong hinge, and on the other side by a hasp, or in any other suitable way, so that the end of the cylinder may at once and with ease be laid open at each back stroke for inserting the billet, and covered with the cap again for forward stroke of plunger. The cap is bored longitudinally—the hole tapering from 2¼ in., where it fits against the bore of cylinder to 1 in. at the other end; at the end of cap a cast-steel block or point is screwed in, bored in the same way, and tapering from 1 in. to the size required for the rod or wire. This point can be changed in an instant when it is required to change the size of rod. Not only the cylinder, but the hinge, &c., must be very strong. The hot billet from the balling furnace is cut to the required length in the same way as for the guide rolls, and is pushed into the cylinder, the plunger being then at the other end for commencement of stroke. The cap is at once closed, and fastens with a hasp of its own accord. The forward stroke of plunger forces the billet through the taper bore of cap and steel point; it comes out at the other end a rod in every way better finished than a rolled rod. Close by the point must work a small light shears, worked in the usual way, for cutting the rods into the required lengths. At the end of the stroke the rod, if not for wire, must be cut off as close to the point as possible—the cap again opened and a second billet put in, which not only pushes out the small portion of first billet remaining in the taper of cap, but from the great pressure used welds with it, and forms one continuous rod. It takes less than two minutes to work out the charge from a balling furnace, even with the smallest sizes. If necessary for telegraph wire or other purposes the whole charge in this way, by working the billets quickly one after the other, may be worked into a single piece of wire without joint of any kind, and a wire of almost any length obtained. Water must run continually, not only on the point, but on the whole cylinder. Square bolts may be made as easily as round rods, by having the bored groove of cap and steel point of the required form. It is meant more particularly for working all sizes that are now worked by guide in the guide mill—from 3-16ths to ¾ in. round or square. Its advantage over rolling for these sizes must be obvious. The cost of the machine is very small as compared with the cost of erecting a guide mill train with necessary machinery. The cost of power for working it is really nothing; whereas with the guide mill, from the high speed required, the cost of power and wear and tear is often very considerable. In the way of labour a man and boy alone are required, and can get through a large amount of work, more especially with wire and light work. The iron is only a few seconds in being worked out, so that it is finished off at a much higher heat than can be done with the rolls.

ELECTRO-MAGNETIC MOTIVE POWER.—An invention, which relates to the means of obtaining electro-magnetic motive power by direct rotary action, has been provisionally specified by Mr. A. Potter, of Birmingham. The engine consists of a fixed circle or band of soft iron bars, screwed straight across the inside edges of two or more stout wheels; the widths of these bars are to correspond with the thickness of the coils of the electro-magnets to be used, the distance between each bar is to be double that of the bars themselves, the number of bars to be used in the circumference of the wheels may vary according to the circumference, which measurement must be equally divided by the thickness of the cores of the electro-magnets. The axle or shaft of the engines is to be set in bearings supported by standards from the foundation plate, and its centre will be also the centre of the circle of bars, which form armatures for the electro-magnets attached in radial lines to the central shaft. The length of the armatures may be varied, so as to allow of several electro-magnets being attached to the shaft side by side in the same radial line, and form an engine of greater breadth. There should be three, six, or any multiple of three electro-magnets fixed on the axle—that is to say, such number of radial magnets, although each radius or series may consist, as stated, of one or more than one magnet on the axle each in the same plane, and they are to be of such length as to rotate as closely as possible to the armatures, but without actual contact. The invention also relates to a brake for connecting and disconnecting the electric current, which consists of metallic plates studded with platinum points, and insulated from the axle and from each other; the platinum points are to be fixed in each of the metal plates at equal distances apart, and at the same relative distances as the armatures on the wheels, the thickness of the points to measure the same in degrees as the width of the armatures. The metallic plates are so adjusted that none of the pins in all the plates shall be in the same point of the circle. Connecting screws establish contact with the platinum points, and one end of the wire coiled on the electro-magnets. Platinised rollers with spring

bearings are to be connected with the two poles of a battery, but only one roller acting at a time, and one point of the brake must always be in contact with one of these rollers. Two platinised spring brakes are to be connected with the two opposite poles of a battery, and alternately to make connection with the shaft, and an insulating material half surrounding the same. Terminal screws with collars receive one end of the wires on the electro-magnets. By these arrangements when the brake has revolved half-way round the contact is between the platinum points and one of the platinised rollers, and in the remaining half revolution the contact is with the opposite platinised roller; these changes taking place every revolution, the poles of the electro-magnets are reversed and permanent polarity prevented, thus ensuing a rapid discharge of the induced magnetism, while the direction of the engine is continued in one unvaried course. In order to reverse the engine a second brake is to be attached to the shaft, or the platinised rollers may be shifted by a revolving gear, so as to reverse the direction of the electro-magnets. The method of de-magnetising the iron cores of the electric magnetic engines, and the result may be obtained by modified forms of the mechanical arrangements described either for de-magnetising the iron so often as it is magnetised, or for doing so at intervals, in all cases it is done by reversing the polarity of the magnets. For example, if three magnets be used, the first is to be connected so as to travel to an armature, *or vice versa*, the space through which it travels making a connection with the second magnet, and causing that to travel in the same or an opposite direction, at the same time passing an instantaneous current through the first in a reverse direction to that employed for obtaining power, thus de-magnetising the first magnet, which would otherwise retard the power of the second, the third being brought into action in the same way, and demagnetising the second, and so on.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAL GRYLLS sold, on May 16, 10 tons 2 cwts. and 3 lbs. of black tin, and on May 18, 10 tons 17 cwts. 1 qr. 27 lbs., which together realised 1415*l.* 1s. 1d. This leaves a profit of between 400*l.* and 450*l.* upon the month's operations. At the next general meeting, to be held in a month hence, the usual dividend of 1*l.* per share will be declared.

EAST DEVON CONSOLS.—An improvement of great importance and considerable promise has taken place in the masterly cross-course now being driven upon in the 70. When last reported upon the south end was producing about 4 cwts. of silver-lead per fm., worth 20*l.* per ton, and such are the very promising prospects now held out by the drivings north and south, for the development of this splendid cross-course (which will also arrive at the intersection of the Great Devon Consols lode at the junction, in a few months), that it is confidently hoped the mine will very speedily prove itself a worthy offshoot of its rich neighbour.

WHEAL CREBOR.—The attention of capitalists is at last being drawn to the merits of this mine. This is just one of that class of undertakings which investors should carefully watch, inasmuch as if it does turn up a trump it will be a trump to some purpose, whereas, should it fail (which, under present prospects, would be a wonder), the working expenses are really so light that no one could take any great harm, being less than 200*l.* a month, and about half of this paid (before the late discovery was made) from returns of ore. What will the mine be able to do now, supposing the lode to hold at its present value? why, dividends must be very near at hand, and, as the mine is worked by water-power, of which there is a never-failing supply, there can be little question but that they will be on a very liberal scale. I have been a shareholder and have watched its progress for years, and am proud to see it turning out so well; shareholders should bear in mind that the late discovery is one of no mean order. When first made it was only 1¼ ton to the fathom, now 11 tons; and who can tell where it will stop? Why should it not equal the Devon Great Consols? No one can say it will not. The old proverb, "There is never one good fish caught but there is another left," may here be verified.

CORNUBIA (tin) has considerably improved in several points; No. 5 lode is now in the north side of the shaft, and yielding well for tin; No. 6 lode has gone off south of the shaft, and, as the 70 fm. level will be reached in a month from this time, a short cross-cut will intersect No. 6 lode, which from the appearance when last seen (a little below the 60) warrants the expectation of a rich course of tin. The surface machinery is rapidly approaching completion, when very large returns are anticipated.

SOUTH BASSET MINE, in 512 shares, 15*l.* 10s. 8d. paid, and selling at 8*l.* each, is worth attention. This property is quite neglected, and may one day astonish the mining public; it adjoins Wheal Basset to the south, and is between South Frances and Wheal Buller, having the same lodes: these three mines, on an outlay of 13,197*l.*, have returned in profits 723,340*l.* South Basset will, no doubt, become very profitable, and shares realise a high price. Improvements are shortly expected.

GREAT CARADON.—The cross-cuts in the 60 are being pushed on as quickly as possible, and the lode will be met with within three months. It is the general opinion that the East Caradon caunter and other lodes pass through this property, which adjoins Glasgow Caradon Consols, now selling for 133,000*l.* This mine has been specially inspected, and shareholders will do well in holding on, and not be frightened out of their shares by parties who know nothing of the merits or prospects of the mine.

WHEAL IDA LEAD MINE.—This sett is in the Caradon district, north of Ludcott, and south-east of South and East Caradon; a rich lead lode has been found a few feet from surface; it is looked upon as a first-rate speculation, and one likely to do well. Shares can be bought at a few shillings each, and are worth attention.

GOLD DIGGINGS IN THE BED OF THE RIVER MAWDDACH.—We hear that one of the directors of the St. David's Gold Mine has been deputed to inspect this river, in company with Capt. Faull. This gentleman writes that gold has been discovered in his presence at a very slight depth from surface, and that the search is being vigorously prosecuted. The result of this discovery is highly favourably to the prospects of the company, and will, no doubt, operate favourably on their shares.

OLD WHEAL NEPTUNE (Marazion).—Capt. Joseph Vivian, of North Roskear, has inspected the mine on behalf of the directors; the report is of a highly satisfactory character, a copy of which can be obtained at the office of the company.

PROSPER UNITED.—At the general meeting held the middle of last month the agents estimated the returns for the ensuing three months at 1000*l.* per month. The actual returns for April have, however, been 1208*l.*, and the costs 1400*l.*, showing a loss of only 200*l.*, which would have been a profit but for the very low standard. The returns for May will probably be larger. The mine is looking very well. The 60, west of Louisa's shaft, has much improved this week, the south part being now worth 3 tons per fm. The 60 east is worth 1 ton per fm.; the 60, east of Hill's shaft, contains stones of rich grey ore; the 60 west is worth 6*l.* per fm. for tin; the 50 west is worth 2 tons per fm., the winze below this level, 2½ tons per fm.; and the 50 east is worth 8*l.* per fm. for tin. In a few weeks Louisa's shaft will be down to the 70, and the lode cut through there, when the sinking of the winze below the 60 can be resumed, the lode there when suspended for the water being worth about 4 tons of yellow ore per fm. But for the very low standard for copper, this mine would be fully paying cost, even at the present rate of returns.

WHEAL GRENVILLE is progressing in the most satisfactory manner, and will no doubt speedily become a permanently profitable mine. About ten days since a new lode was cut in the 100, driving west on the caunter lode, and which is from 4 to 5 feet wide, worth full 12*l.* per fm. for tin, and fast improving. Yesterday (Friday) information was received that this new lode had just been intersected in the 90, where, so far as seen, it is worth from 15*l.* to 20*l.* per fm.; and as it is also daily expected to be met with in the 80, the discovery adds largely to the value of the mine. There are now three productive lodes in the mine, with the chance of meeting with another lode in the 80 cross-cut north.

The GREAT CARADON MINE has been inspected by Capt. James Seccombe, jun., who reports that the machinery is very good and in good working order, and he considers the explorations have been upon a judicious and economical scale. For the development of the property, he is of opinion that a better course cannot be adopted than to confine operations for the present to the driving north and south in the 60, to cut the lodes at that depth, where he anticipates they will be found more compact and regular than in the 40, and with an improved appearance.

MERLLYN.—Amongst the promising mines totally neglected by the market may be mentioned Merllyn. It is a lead mine, situated in Wales, and some years since paid good dividends. At the present time lead is raised, but scarcely enough to pay expenses, sixpenny calls being necessary. A good discovery is daily expected in the western part of the mine, and, should a good run of ore ground be discovered, a great rise in the price of the shares will be the result. The captain says:—"For the past day or two we have been drawing out the water from the western shaft, so as to enable us to work the bottom level on the east and west lode, from whence the water drove us some time ago. This I consider a very important point, as, if we can trace this lode to the east of the cross-course, I think we shall find it to be a good lode." When this lode was last met in an upper level the shares went to 35s. each. At present they are about one-fourth that sum.

NANTEOS.—The prospects at this mine are of an encouraging character. The lode will be intersected in about three or four weeks from the present time, and, from the indications presented, it is expected that it will be found of the same value as the course of ore gone down in the engine-shaft—20*l.* to 30*l.* per fathom; in which case the value of the property will be considerably enhanced.

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL. | OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH. | GERMAN SILVER—IN INGOTS, SHEET

NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS, NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.

Reference.—Professor Miller, King's College, London.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO. PENHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED TO EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE upon warrant that it will prove equal to, if not better than any to be procured elsewhere.

TO CAPITALISTS.—Messrs. LEICESTER AND CO., INSPECTORS and VALUERS of MINES, &c., MELBOURNE, VICTORIA, OFFER THEIR SERVICES to SELECT and INVEST CAPITAL in MINING PROPERTIES, for which they charge 2½ per cent.; and they also COLLECT and TRANSMIT the DIVIDENDS, charging £5 per cent. on their amount. Messrs. LEICESTER and Co. earnestly call the attention of capitalists to the many opportunities they possess of investing, to pay from £50 to £150 per cent. per annum. Sums under £50 will be charged extra. All remittances must be made through our agent, Mr. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London; or direct through our bankers, the Union Bank of Australia.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before MONDAY, the 25th instant, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY— CAKE COPPER.

And that the conditions of the said contract may be had on application at the Indian Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M. of the said 25th day of May, 1863, after which hour no tender will be received. GERALD C. TALBOT, Director-General.

India Office, May 12, 1863.

Contract for Coal.

CONTRACT FOR LOCOMOTIVE ENGINE COAL.—The Directors of the SOUTH-EASTERN RAILWAY COMPANY are OPEN to RECEIVE TENDERS for the SUPPLY of TEN THOUSAND TONS of WELSH or OTHER COAL, suitable for use in locomotive engines, delivered into the company's trucks at Reading, at the rate of 150 tons a week.

Tenders to be sent in on or before Wednesday, the 10th June next, endorsed "Tender for Coal," addressed to the undersigned. S. SMILES, Sec.

London Bridge Terminus, May 22, 1863.

BIRMINGHAM WAGON COMPANY (LIMITED)—SECRETARY WANTED.—Applications to be addressed to the directors, at the offices of the company, No. 3, Newhall-street, Birmingham.

TO CAPITALISTS.

CLEVELAND BLAST FURNACES.—The ADVERTISER DESIRES the CO-OPERATION of a FEW GENTLEMEN to JOIN in the ERECTION of FURNACES on a most ELIGIBLE FREEHOLD ESTATE, commanding 16 ft. of the valuable CLEVELAND BANDS of IRONSTONE. Arrangements have been made for the purchase, by which the stone stands at the minimum of 3d. per ton only, and with practical gentlemen and one-half the requisite capital.

The furnaces being on the top of the stone itself, abundant water and slag deposit ground on the estate, coke, coal, and limestone at the minimum rate of the district, the Yorkshire and Cleveland Railway, and a station in front of the pig beds, &c., present a combination for economic production not to be excelled.—Address, "H. C.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

METAL TUBES AND CYLINDERS.—The ADVERTISER has COMPLETED an IMPROVEMENT in MACHINERY for MANUFACTURE of SAME, which is protected at home and abroad. He is now DESIROUS of JOINING with a CAPITALIST to FURTHER the UNDERTAKING, which promises to be a valuable one. A machine is ready for view.—Apply to JNO. KENDRICK, 20, Easy-row, Birmingham.

TO SPECULATORS.—The ADVERTISER, a retired mine captain of great practical experience in Cornwall, is in a POSITION to GIVE the NAMES of SIX PROGRESSIVE MINES which are SAFE in his opinion (founded on a perfect knowledge and reliable data) to ADVANCE HUNDREDS PER CENT. in a FEW MONTHS. Terms, commission on profit.—Address, "Investor," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO CAPITALISTS.—The OWNER of a COLLIERY in SOUTH WALES, at present raising 160 tons a day of locomotive coal, having a ready and regular sale, is DESIROUS of MEETING with PARTIES, having from £10,000 to £15,000 at command, to JOIN HIM in SINKING on the same estate to the well-known ABERDARE SEAMS of COAL. Every information given. Principals or their solicitors only treated with.—Address, Messrs. TUCKER and NEW, solicitors, 25, Clement's-lane, London, E.C.

AGENCY FOR RIVETS, BOLTS, NUTS, &c.—WANTED, for LONDON and DISTRICT, a respectable AGENT, already in the trade.—Address, with references, to "H. S.," MINING JOURNAL office, 26, Fleet-street, E.C.

WANTED, a RESIDENT MANAGER for a COLLIERY in NORTH WALES, which is at present producing upwards of 50,000 tons of coal a year. He must be able to take the whole charge of the colliery, and conduct all the commercial affairs of the company.—Application, with full particulars, to be made on or before the 19th inst., to "L. J.," MINING JOURNAL office, 26, Fleet-street, E.C.

WANTED, a COMPETENT MINING CAPTAIN, to PROCEED to ONE of the NORTHERN PROVINCES of BRAZILS, to INSPECT a GOLD MINE. One who has already been in that country, and knows something, will be preferred.—Apply to "S. 52," Post-office, Liverpool.

WANTED, by the Directors of the TALARGOCH MINING COMPANY (LIMITED), DYSERTH, near RHYL, a SECOND-HAND HORIZONTAL ENGINE, of from 18 to 22 in. cylinder, with winding apparatus complete.—Talargoch Mine, May 20, 1863.

SLATE QUARRIES.—WANTED, a SECRETARY for a FIRST-CLASS SLATE QUARRY COMPANY in WALES, to be formed under the Limited Liability Act. The position of the quarry, the quality of the slate, and the extent and terms of the lease, are most favourable, and worthy of a large capital. It is intended to have agencies in the provinces, as well as in London, and the secretary will be expected to aid with influential directors, and to provide preliminary expenses.—Apply by letter, post-paid, with references, to "H. Y.," secretary, MINING JOURNAL office, 26, Fleet-street, London, E.C.

SLATE QUARRY.—The LEASE of a VALUABLE SLATE PROPERTY, near BEDDLEGERT, within eight miles of PORTMADOC, consisting of 140 acres, immediately adjoining a slate quarry of proved value, FOR SALE, on very moderate terms. A railway is now being made within a short distance of the property, on which several quarries of the best slate can be opened, at very little cost.—Letters to be addressed "Slate Quarry," MINING JOURNAL office, 26, Fleet-street, London, E.C., when terms and full particulars will be given.

MINING SETTS.—TO BE DISPOSED OF, an EXTENSIVE SETT of a LEAD MINE, in the best part of FLINTSHIRE, and in the heart of good dividends. Also, the SETT of LIME ROCKS, near a railway. Also, of a SLATE and SLAB QUARRY, near a railway and shipping.—Address, "H. W.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

WINDING ENGINES FOR SALE.—A PAIR of 4 horse power HORIZONTAL ENGINES, on one bed plate, quite new, fitted with link motion for reversing, and clutch on crank shaft, so as to work each engine separately if required. Price £80.—Apply to Messrs. DEATH and ELLWOOD, Albert Engine Works, Leicester, where the engines may be seen.

FOR SALE, a 10 horse PORTABLE ENGINE, on wheels, nearly new, suitable for mining purposes; cylinder 10 in. diameter, 2 ft. stroke; very strong BOILER, with return flue, 4 ft. diameter, and 15 ft. long.—To be seen at Messrs. RICHARDS and Co.'s premises, Old Barge House-street, Upper Ground-street, Blackfriar's-road, London, of whom particulars can be had.

TO BE SOLD, BY PRIVATE CONTRACT, together or separately (by order of the trustees under an assignment for benedit of creditors), all the STOCK IN TRADE, MACHINERY, PLANT, TOOLS, &c., on the FORGE, FOUNDRY, and PREMISES occupied by W. R. HONSLEY, at WHITEHILL POINT, near NORTH SHIELDS.

Also, all the STOCK IN TRADE, PLANT, MACHINERY, &c., on the HARTLEY ENGINE WORKS and PREMISES, at SEATON SLUICE, near NORTH SHIELDS.

The premises are conveniently situated for carrying on a lucrative business, being within easy access of the collieries and principal manufactories of the counties of Northumberland and Durham.

For inspection of inventory, terms of sale, and other particulars, application to be made to JOHN ROGERSON and Co., merchants, Quayside, Newcastle-on-Tyne, or 2, Royal Exchange-buildings, London, E.C.

N.B.—Until the above are sold the businesses will be carried on as hitherto, in all their branches.

DRAKE WALLS MINING COMPANY.—Notice is hereby given, that a GENERAL MEETING of the shareholders in this company will be HELD at these offices, on TUESDAY, the 26th inst., at Two o'clock P.M. precisely.

The meeting will be made SPECIAL for the purpose of resolving or otherwise on the expediency of working the West Drake Walls sett as a separate adventure, and to transact any incidental business. HIRAM WILLIAMS, Sec.

1, Winchester-buildings, Old Broad-street, London, May 15, 1863.

TAMAR SILVER-LEAD MINING COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of this company will be HELD at Messrs. Dunsford and Ranken's offices, 9, Broad-street Buildings, London, E.C., on FRIDAY, the 19th of June next, at Two o'clock precisely.

By order of the Directors, DUNSFORD AND RANKEN.

May 16, 1863.

OLD WHEAL NEPTUNE MINING COMPANY (LIMITED).—Notice is hereby given, that the FIRST ANNUAL GENERAL MEETING of the shareholders in this company will be HELD at the company's offices, on THURSDAY, the 28th inst., at One o'clock precisely, to receive the report of the directors, and the balance-sheet for the past year, and to elect an auditor for the ensuing year in the place of James Price, Esq., who retires by rotation, and offers himself for re-election. By order of the Board, OLIVER WANSEY, Sec.

1, Crown-court, Threadneedle-street, London, E.C., May 19, 1863.

THE WEST CANADA MINING COMPANY (LIMITED).—Notice is hereby given, that the FOURTH ORDINARY GENERAL MEETING of the shareholders of this company will be HELD at this office, on FRIDAY, the 29th day of May inst., at Twelve o'clock at noon precisely, to receive the reports and accounts for the year ending December 31, 1862, and for general purposes, as authorised by the Articles of Association.

Notice is also given, that two directors, Osmond de Beauvoir Priaulx, Esq., and Charles Morrison, Esq., retire from office on the day aforesaid, but are eligible, and offer themselves for re-election.

And notice is further given, that an auditor for the ensuing year will have to be appointed; Joseph George, Esq., offers himself for re-election.

By order of the Board, J. W. VERNON, Sec.

No. 5, Queen-street-place, London, E.C., May 19, 1863.

ISSUE OF DEBENTURES.—The Directors of the WHEAL ELLEN (SOUTH AUSTRALIA) MINING COMPANY (LIMITED) OFFER the BALANCE of £15,000 TEN PER CENT. DEBENTURES, secured by mortgage on their valuable real estate and mines in South Australia. A considerable portion of this issue has been already subscribed for. The debentures are for five years, with certain bonuses.

Further particulars may be obtained, and forms of subscription will be supplied, on application at the offices of the company, 51, Threadneedle-street, E.C.

May 16, 1863. By order, J. BROWN, Sec.

WICKLOW COPPER MINE COMPANY (LIMITED).—At the HALF-YEARLY MEETING of the proprietors of the above company, held at their office, 43, Dame-street, on this day,

EDWARD WRIGHT, Esq., in the chair,

The following resolutions were adopted:—

1.—That the directors' report and statement of accounts for the half-year ended the 1st March, 1863, now read, be received and adopted.

2.—That a dividend of £1 per share (free of income tax) be now declared for the half-year ended 1st March, 1863, payable on and after Tuesday, 30th day of June next, at the company's office, 43, Dame-street, Dublin, between the hours of Ten and Three o'clock, and in London at Messrs. Puget, Bainbridges, and Co.

3.—That Edward Barnes and George M'Dowell, Esqs., be re-elected directors of this company.

4.—That Robert Cully, Esq., the retiring auditor, be re-elected.

EDWARD WRIGHT, Chairman.
HENRY A. CRUISE, Sec.

The business of the ordinary meeting having been disposed of, the meeting was made SPECIAL, for the purpose of considering and approving the Bill applied for in the present session of Parliament. The Bill having been read by the solicitor of the company, it was—

Moved by the CHAIRMAN, seconded by OCTAVIUS O'BRIEN, Esq., and resolved unanimously:—

That the Bill now read, intituled "An Act for the Amalgamation of the Hibernian Mine Company with the Wicklow Copper Mine Company (Limited), and for other purposes," be and is hereby approved of. EDWARD WRIGHT, Chairman.
HENRY A. CRUISE, Sec.

Mr. Wright having vacated the chair, and James Haughton, Esq., having been called thereto, it was—

Moved by OCTAVIUS O'BRIEN, Esq., seconded by J. STUART, Esq., and resolved:—

That the best thanks of the meeting be, and are hereby, accorded to the Chairman, and through him to the other directors, for the successful management of the affairs of the company.

Moved by J. D'ARCY, Esq., seconded by H. M. QUINAN, Esq., and resolved:—

That a like vote of thanks be accorded to the secretary and other officers.

43, Dame-street, Dublin, May 19, 1863. JAMES HAUGHTON, Chairman.

THE WICKLOW GENERAL MINING COMPANY (LIMITED).

Incorporated pursuant to the Companies Act, 1862.

Capital £40,000, in 20,000 shares of £2 each; deposit 10s. per share.

DIRECTORS.

JOHN CONOLLY, Esq., Kilmore, Artane.
JOHN COX, Esq., Streatham Hill, London.
JEREMIAH DUNNE, Esq., J.P., Fitzwilliam-square, Dublin.
SILAS EVANS, Esq., 11, Waring-street, Belfast.
WILLIAM R. FAYLE, Esq., 58, Townsend-street, Dublin.
JAMES F. LOMBARD, Esq., J.P., South Hill, Rathmines.
MICHAEL MURPHY, Esq., Beverston, Rathmines.
VALENTINE O'B. O'CONNOR, Esq., D.L., Beresford-place, Dublin.

With power to add to their number.

BANKERS—The Hibernian Joint-Stock Banking Company, Dublin, and its branches.
SOLICITORS—Messrs. David and Thomas Fitzgerald, 20, St. Andrew-street, Dublin.
BROKERS—Messrs. Bruce and Symes, 37, Dame-street, Dublin.
Edward Fox., Esq., 51, Dame-street, Dublin.
T. P. Hayes, Esq., 18, Westmoreland-street, Dublin.
Messrs. Woodlock and O'Donnell, 42, Dame-street, Dublin.
SECRETARY—J. P. O'Reilly, Esq.

OFFICE OF THE COMPANY,—15, DAME STREET, DUBLIN.

The primary object sought by the establishment of the proposed company is the working of the copper and sulphur mines in the townlands of Rockstown and Newbawn, in the parish of Castlemacadam, county of Wicklow, being a portion of the celebrated Wicklow copper and sulphur mining district.

The sett is very extensive, containing 792 acres. Its extent from east to west on the line of the lodes is from 1½ to 2 miles, and from north to south about 1 mile.

The geological formation of Rockstown and Newbawn is the same as that found in the neighbouring mines; the lodes are found in similar positions to the most favoured, and from them similar results may be confidently anticipated.

Perhaps, outside of the best mining districts of Cornwall, no mines have yielded such immense quantities of ore, and paid such profits to the shareholders on the outlay, as the Wicklow Mines.

The property is admirably situated for the transit of stores and minerals, being but 7 miles from the port of Wicklow, and 1 mile from the Rathdrum Station of the Dublin, Wicklow, and Wexford Railway, which runs through the north part of the grant.

A large amount of capital has been expended by the lessees in exploring the surface and laying open the lodes, sinking shafts, and preparing the mines for the reception of machinery.

That portion of the lands of Rockstown which adjoins Connorree, and where the most extensive mining operations have been carried on, has been purchased in perpetuity in the Landed Estates Court. The company having thus become the owners of a considerable portion of the land itself, subject to a mere nominal head rent, will be saved from a large amount which would otherwise have to be paid for surface damages, will have the exclusive control of an excellent water-course (most valuable in the development of the mine), and will receive the rents of this portion of the property.

Powers have also been taken to work such other mines or quarries, and carry on such works in connection therewith, as may be deemed advisable.

Prospectuses, maps, engineers' reports, and forms of applications for shares, can be had of the brokers of the company; of the secretary, at the office, 15, Dame-street, Dublin; and of SILAS EVANS, Esq., 11, Waring-street, Belfast.

THE HAVAN SILVER-LEAD MINES COMPANY (LIMITED), CARDIGANSHIRE.

Capital £25,000, in 5000 shares of £5 each.

Deposit, 10s. per share on application, and 20s. on allotment.

DIRECTORS.

M. C. SETON, Esq., Maida Hill, and Wheal Seton and Treskerby, Cornwall (Director of the Silver Mountain Mines Company, Limited, Cardiganshire, &c.)
R. HESKETH, Esq., late British Consul at Rio Janeiro (Director of the Don Pedro North del Rey Gold Mining Company, Limited, Brazil).
A. ALISON, Esq., 72, Sloane-street, Cadogan-gardens.
General R. SHORTREDE, Blackheath (Director of the Silver Mountain Mines Company, Limited, Cardiganshire).
S. EDWARDS, Esq., C.E., Adelphi (Director of the Silver Mountain Mines Company, Limited, Cardiganshire; the Don Pedro North del Rey Mining Company, Limited, &c.)
Lieut.-Col. F. WEMYSS, Kensington (Director of the Silver Mountain Mines Company, Limited, Cardiganshire).

BANKERS—English and Irish Rank, 26, Poultry, E.C.
SECRETARY—Mr. Holland Dell.

TEMPORARY OFFICES,—18, GRESHAM HOUSE, OLD BROAD STREET; and 1, YORK BUILDINGS, ADELPHI.

ABRIDGED PROSPECTUS.

The objects of this company are the purchase and working of the celebrated Havan and Henfwich Silver-Lead Mines, situate in the parish of Talybont, Cardiganshire, and surrounded by some of the greatest mines of the day, including the Welsh Potosi, East Darren, and the Cwmsymlog United Mines, as well as the Silver Mountain Mines, which, after being worked for a few months under nearly the same directors, already bid fair to become as profitable as any in the county.

The sett (which has been developed sufficiently to make its success a matter of certainty) is held at a royalty of 1-14th from Pryse Loveden, Esq., is very extensive (upwards of 700 acres), and includes several very strong and celebrated lodes.

Powerful crushing, drawing, and pumping machinery is being delivered on the mine, and will be erected complete and at work (dressing ore for the market) in less than three months from this time.

Applications for shares, accompanied with deposit, which will be returned in full if no allotment be made to the applicant, may be made to the bankers, or to the secretary, at the offices of the company, where specimens of the ore, and plans and sections of the mine may be inspected.

Prospectuses with full reports, and forms of application, may be obtained at the offices of the company.

THE HAVAN SILVER-LEAD MINES COMPANY (LIMITED), CARDIGANSHIRE.

Notice is hereby given, that NO APPLICATIONS FOR SHARES in the above company will be RECEIVED AFTER WEDNESDAY, the 27th inst., for LONDON; and THURSDAY, the 28th inst., for the COUNTRY. HOLLAND DELL, Sec.

MANCHESTER.

MR. W. HANNAM: OFFICES, ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER.

MINING, SLATE QUARRYING, INSURANCE, and GENERAL STOCK and SHAREDEALER.

A monthly investment Circular on application.

Sharedealing in this office is limited to special mines, and companies whose pretensions have been personally investigated, and to the dividend-paying mines ordinarily dealt with on the London market, and for the latter purpose arrangements have been made for the earliest information from the great mining districts. There can be little doubt that in dealing with well-established, dividend-paying mines, investors, without any greater risk than accrues from purchase of railway or house property, receive a much larger regular profit than from any other species of investment, free from all trouble, and paid in the most convenient form for those who have limited incomes—viz., every two or three months; while those who enter into new undertakings, such as progressive mines, have the knowledge that nothing which is not *bona fide*, and has stood the test of thorough examination, is submitted to them. It cannot, of course, be expected that where the profits are so enormous that these latter investments should be entirely free from risk. All that can be done is to ascertain the respectability of the management, and the value of the prospects. This done, no speculations are likely to be so valuable as those in mining operations; it being no uncommon occurrence for shares to rise in value 200 and 300 per cent. in a few months.

BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES.

Messrs. T. FULLER AND CO., 26, CHANGE ALLEY, CORNHILL, LONDON, TRANSACT BUSINESS in EVERY DESCRIPTION of SHARES in BANKS, RAILWAYS, CANALS, INSURANCE, MINES, and GOVERNMENT STOCK. Dividends received, calls paid, and every class of Stock Exchange business effected.

There being a considerable amount of money locked up in shares not prominently before the public, and consequently difficult of sale, Messrs. T. FULLER and Co. invite the holders of such stock to communicate with them, having channels for the disposal of every description of shares.

FOR SPECIAL SALE:—Shares in an established company (limited), the property freehold; and in several mines which pay regular dividends of 12½ to 20 per cent.

Messrs. FULLER and Co. having had upwards of 20 years' experience in the mining market, prompt them to point out shares in certain progressive mines as prizes for the year 1863. Telegraphic messages promptly attended to.

Commission, 1¼ per cent.

Bankers: Metropolitan and Provincial.

ASSAYS AND ANALYSES OF EVERY DESCRIPTION Conducted by JOHN MITCHELL, F.C.S., M.G.A. (late Mitchell and Rickard) Author of "Manual of Practical Assaying," "Metallurgical Papers," &c.

All communications and samples to be addressed (free) to Mr. MITCHELL, care of Mr. P. Clay, 29, Great St. Helen's, London, E.C.

PRELIMINARY PROSPECTUS.

THE NORTH WHEAL LUDCOTT MINING COMPANY,

ST. IVE, CORNWALL.

Divided into 4800 parts, or shares.

BANKERS—Metropolitan and Provincial Bank, Cornhill, London.

MANAGER—Capt. William Hancock.

SECRETARY—Mr. Charles R. Thompson.

OFFICE,—23, LAURENCE POUNTNEY LANE, E.C.

The valuable property is situated to the north of Wheal Ludcott and Wrey Consols, and surrounded by the following productive and dividend mines of the district, the amount of which have exceeded and paid to the shareholders considerably more than the total capital subscribed, independent of the present market value, as shown below:—

No. of shares.	Name of mine.	Amount paid.	Price.	Div. per share.
6144	East Caradon	£2 14 6 ..	£ 42 10 0 ..	£ 6 15 0
1024	Herodsfoot	8 10 0 ..	40 0 0 ..	21 10 0
9000	Marke Valley	4 10 6 ..	8 10 0 ..	2 8 0
512	South Caradon	1 5 0 ..	410 0 0 ..	405 0 0
1024	West Caradon.....	5 0 0 ..	30 0 0 ..	101 1 3
4800	Wheal Ludcott and Wrey..	2 10 8 ..	5 10 0 ..	3 7 0
1024	Wheal Mary Ann	8 0 0 ..	16 10 0 ..	57 7 6
1040	Wheal Treiawny	5 17 0 ..	17 10 0 ..	46 12 0

The extent of North Wheal Ludcott is one mile in length on the course of the lodes, and contain five silver-lead lodes and three copper lodes; the stratum is identical with and corresponding with that of the neighbouring mines, the fact of which must convince the most sceptical of the real value of this property, and of its becoming equally as valuable and profitable as the adjoining mines.

An engine-shaft is sunk 50 fathoms deep, levels driven, and the necessary buildings erected, at a cost of £60000; each lode has been proved, and a new shaft is in course of sinking on the main lode, which present unusual prospects of a rich deposit of silver-lead at an early date.

A limited number of shares are for disposal at £1 each, application for which can be made to the secretary, at the office of the company.

Extract from the *Mining Journal*, June 21, 1862.

REPORT ON CORNWALL AND DEVONSHIRE.

(From our Correspondent in Truro.)

June 19.—A remarkable discovery of silver, which has resulted in an equally remarkable rise in the price of shares, has been made at Wheal Ludcott, a lead mine situated in the parish of St. Ive, about 3¼ miles from Liskeard, on the Callington-road. This mine is worked on the north and south lead lodes, which traverse the parishes of St. Ive and Menheniot, to the south of the Caradon granite range. It is bounded immediately on the north by Wheal Wrey, a mine which made large returns, and gave considerable profits; but which becoming poor was a short time since sold to the Ludcott adventurers for about £3500. The original Ludcott sett was a very short one, but still the mine made good profits. At present the two united setts of Ludcott and Wrey have a length of upwards of 1 mile, of which a great proportion, nearly ¾ mile, of the northern part is as yet unexplored. When the Wheal Ludcott adventurers found themselves obliged to buy the Wheal Wrey sett, for they really had no option, there were considerable differences of opinion as to their prospects. A large party took a gloomy view, and thought a call would be necessary to pay the instalments for the materials. So much was this the case, that some of the largest shareholders in Liskeard have quite recently sold their shares at prices ranging from 50s. to 60s. One Liskeard shareholder, the holder of 300 shares, sold them all at prices ranging from £2 7s. 6d. to £2 10s.; and then one of the oldest shareholders in the mine sold his at about £3; altogether about 1000 shares were recently sold from Liskeard for, probably, about £3000. Capt. Knapp had all along the greatest confidence in the mine, and always assured the shareholders that he would guarantee from its funds to pay the instalments for the machinery. The more knowing ones, however, paid no attention to these assurances; they had the mine inspected by their own agents, and sold their shares, which, strange to say, were bought by the public all through the kingdom, who on this, as on other occasions, have shown a better instinct in their investments than people on the spot.

Near the boundary of Ludcott and Wheal Wrey there is a large flookan cross-course, underlying south, whose back is consequently in Wheal Wrey sett, but which dips into Ludcott. This cross-course heaves the lode to the left about 3 fms.; and it is in this cross-course, near its juncture with the lode, that the silver deposit has been found. It was discovered in the 70, driving north, but some silver has also been found in the 60; above this the cross-course is in Wheal Wrey, where the levels have gone together, in consequence of the ground being worked away, the lodes having made rich for lead up to the cross-course. The next level in Ludcott, below the 70, is the 84, which is not yet up the cross-course.

The silver in the 70 was first found to the west, between the two parts of the lode, on the south side of the cross-course. It has also made to the west of the western part of the lode for about 3 fms. long, so far as yet seen. To the east of the main lode about 7 fathoms a north and south sparry branch, about 15 in. wide, comes in contact with the cross-course for 6 ft., on either side of which silver has also been found. On the main part of the silver ground a winze has been sunk below the 70 towards the 84; in this winze there is a valuable lode, but the sinking is now suspended, in consequence of the water being in. The silver found here is of various kinds—red, grey, black, and native. There seems to have been a considerable quantity of ruby silver met with, and also the grey sulphide and black oxide; a good deal of native capillary silver has been discovered, but not in such considerable proportions as is usually the case; indeed, when met with, the native silver seems more compact, and not so much in wires as is usually the case.

The following particulars of the quantity of silver already sold from the mine will give the best evidence of the value of the deposits. The parcel of 1 ton, sold for £694, is one of the richest ever sold in the country; indeed, I am aware of its being exceeded by a parcel of any quantity, except in the case of a parcel of 8 cwt. 2 qrs. 11 lbs., sold for West Wheal Darlington, in 1853, at the rate of £1075 5s. per ton.

SILVER ORES SOLD AT WHEAL LUDCOTT FOR NINE MONTHS.

		Tons.	cwts.	qrs.	lbs.						
1861.—Sept.	20.....	3	0	0	0	£290	0	0	£ 870	0	0
Sept.	27.....	10	0	0	0	47	6	0	473	0	0
Nov.	13.....	10	0	0	0	34	10	0	345	0	0
1862.—Jan.	4.....	25	0	0	0	2	0	6	50	12	6
Jan.	13.....	1	0	0	0	694	0	0	694	0	0
Feb.	22.....	1	4	2	0	652	0	0	898	14	0
March	1.....	13	0	0	0	25	7	6	329	17	6
March	22.....	10	0	0	0	1	7	6	13	15	0
March	27.....	2	0	0	0	457	0	0	914	0	0
April	3.....	1	2	0	0	235	0	0	258	10	0
April	9.....	1	18	2	0	367	6	6	707	2	0
May	10.....	3	10	0	0	378	0	0	1323	0	0
June	5.....	20	0	0	0	31	15	0	635	0	0
Sampled June	17 (crop)	4	0	0	0 ..	expected to		..	2000	0	0
"	" (seconds) ..	3	10	0	0 ..	realise about		..			
Total									£9512	11	0

The following statement of accounts, presented at the general meeting in Wheal Ludcott, held on the 7th October, will show the progress made to that date:—

From the commencement of Wheal Ludcott to the present time there has been expended in labour cost the sum of £39,084, and in materials £22,047. There has been an amount of £12,150 paid in calls. The lead ores sold have realised £54,255, and the silver ores £14,911. Wrey and Ludcott have each divided profits of about £10,000.

P.S.—May 4, 1863.—Since the above date referred to, further dividends of 12s. 6d. has been paid, amounting to £3000—making together a total of £13,000.

From the *Mining Journal*, November 29, 1862.

North Wheal Ludcott, Nov. 26, 1862.—Having on Monday and Tuesday examined the North Wheal Ludcott, I enclose you a short report as to operations to commence on, and hope soon to be able to report to you something very good. The mining property is situated to the east and north of the Wheal Ludcott and Wrey United Silver-Lead Mines; it is very extensive, and contains several lodes, in a good stratum of ground for the production of silver-lead ores. About 12 years ago a steam-engine was erected on one part of this sett, a shaft sunk 50 fms. from surface, and a small quantity of lead ore was taken therefrom. To the north of the former workings I find an adit driven in the hill several fathoms, to all appearances on a large promising lode. The mouth of the adit being choked, I could not examine it, but by what I can see the driving the present adit end on the same lode will intersect an east and west lode. In order to prove these points, I have placed some men to clear the adit, also to open on the east and west lode. This will be our operations to commence with in this part. W. HANCOCK.

From the *Mining Journal*, March 14, 1863.

North Wheal Ludcott, March 12, 1863.—We have now brought up an open cutting from the river about 40 fms. west. In the first 12 fms. we met with a lode 1¼ ft. wide, composed of gossan, mundic, spar, and flookan, a very promising lode. About 25 fms. further west another large lode has been met with, denominated No. 2 lode, composed of gossan, beautiful flookan, mundic, capel, and, I may say, occasionally small particles of lead. We have sunk 3 fms. on its course; it is a well defined lode, about 4 feet wide, underlying east a little, and one that is at once deserving, according to my views, of machinery to prove it deeper, as I have no doubt (say) from 20 to 30 fms. deeper this lode will be found profitably productive. I must, therefore, urge you to immediately supply the necessary machinery, as I fear we cannot sink deeper on the lode in consequence of the water. I have commenced a small shaft in the country near the lode, to try to get down 10 fms., and then cross-cut, but I am doubtful whether the water will permit us. Between the two lodes mentioned there are two branches, from 6 in. to 1 ft. wide, of kindly appearance. W. HANCOCK.

THE MUTUAL LIFE ASSURANCE SOCIETY
(A.D. 1834), 39, KING STREET, CHEAPSIDE, LONDON, E.C.
The bonuses have averaged more than 2½ per cent. per annum on the sum assured.
Prospectuses, and the last report, to be had on application.
CHARLES INGALL, Actuary.

ACCIDENTS BY ROAD, RIVER, OR RAILWAY,
ACCIDENTS IN THE FIELD, THE STREETS, OR AT HOME,
May be provided against by taking a Policy of the
RAILWAY PASSENGERS' ASSURANCE COMPANY,
64, CORNHILL, LONDON.
£140,000 has been already paid as compensation for accidents of all kinds,
In 75 fatal cases, and 6880 cases of personal injury.
Rates and further particulars may be obtained at the railway stations, of the local agents, or at the
HEAD OFFICE, 64, CORNHILL, LONDON, E.C.
Railway Passengers' Assurance Company, WILLIAM J. VIAN, Sec.
Empowered by special Act of Parliament, 1849.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.
MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES.
His monthly "Circular" for May contains important information on legitimate mining, also a selected list of dividend and progressive mines. Forwarded on receipt of six postage stamps.—5, Finsbury-street, Finsbury-square, London.

ASSAYS AND ANALYSES OF ORES, METALS, MANURES, &c., on the most moderate terms, and with the utmost accuracy
List of fees per post, on application.
JOHN LONGMAID, CITY LABORATORY AND ASSAY OFFICE,
31, THROGMORTON STREET, E.C.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WHEAL VOR AND EAST WHEAL METAL MINING COMPANY.—By an order made by his Honour the Vice-Warden of the Stannaries in the above matter, dated the 16th day of May inst., on the petition of Nicholas Smith and William Pulteney Scott, contributories, and also creditors of the above-named company, it was ordered that the said NEW WHEAL VOR AND EAST WHEAL METAL MINING COMPANY, previous to the registration thereof, should be WOUND-UP by this Court, under the provisions of the Companies Act, 1862.

And it was ordered that Joseph Tregoning, the official liquidator heretofore appointed by this Court, in the matter of the registered company, bearing the same name as the above company, should be, and he was thereby, appointed the official liquidator of the company now ordered to be wound-up.

And it was also ordered that the winding-up of the above-mentioned company, under the present order, should proceed *pari passu*, and, as nearly as may be, as one matter or proceeding with the winding-up of the above-named registered company, under the order of this Court, dated the 8th day of April, 1862, distinguishing the contributories of each company.

And it was further ordered that all actions now pending against any contributory of this company, in respect of any debt due from the said company, or claimed to be due, should be stayed until the further order of this Court; and that the several plaintiffs in actions on proof of the said debts or claims, under the present order, should be allowed their reasonable costs in respect of such action, down to the date and notice of this order.

HENRY SEWELL STOKES, Truro, Cornwall
(Agent for Tuffnell Southgate, Temple, London, Solicitor for the said Petitioner).
Dated May 18, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the PELYN WOOD MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 6th day of June next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to William Michell, Esq., the Registrar of the said Court, at Truro.
Dated Registrar's Office, Truro, May 19, 1863.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862, and of the EAST BERTHA MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 6th day of June next, to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to William Michell, Esq., the Registrar of the said Court, at Truro.
Dated Registrar's Office, Truro, May 19, 1863.

In Chancery.

THE VICE-CHANCELLOR WOOD AT CHAMBERS.

IN the MATTER of the JOINT-STOCK COMPANIES WINDING-UP ACTS, 1848 and 1849, and the JOINT-STOCK COMPANIES WINDING-UP AMENDMENT ACT, 1857, and in the MATTER of the TRETOIL AND MESSER MINING COMPANY.—Upon the application of the Official Manager of the above-named company, and upon reading the *London Gazette* of the 28th day of April, and 1st of May, 1863, the *Times* newspapers of the 27th day of April, and 2d day of May, 1863, the *Mining Journal* newspaper of the 25th day of April, 1863, and the *Royal Cornwall Gazette* newspaper of the 1st day of May, 1863, and the affidavit of the said Official Manager, sworn on the 24th day of April, 1863, and the Schedules or Exhibits respectively marked A, B, and C therein referred to, and the affidavit of William Bishop, sworn this day, and the Exhibits respectively marked A and B therein referred to, and now on the file of proceedings in this matter, it is PEREMPTORILY ORDERED that a CALL of FIFTEEN SHILLINGS PER SHARE be made on all the contributories of this company.

And it is peremptorily ordered that each of such contributories do, on or before the 28th day of May, 1863, pay to Frederick Whinney, the Official Manager of the said company, at his office, No. 5, Serle-street, Lincoln's Inn, in the county of Middlesex, the balance (if any) which will be due from him after debiting his account in the company's books with such call. HENRY LEMAN, Chief Clerk.

FREDERICK WHINNEY, 5, Serle-street, Lincoln's Inn, Official Manager.
VALLANCE AND VALLANCE, 20, Essex-street, Strand, Solicitors.
Wednesday, the 6th day of May, 1863.

THE BISHOPWEARMOUTH IRONWORKS, SUNDERLAND.—These VALUABLE PROPERTIES, with the ROLLING MILLS and all OTHER MACHINERY, the property of the DERWENT AND CONSETT IRON COMPANY (LIMITED) WILL SHORTLY be SUBMITTED to PUBLIC AUCTION, by direction of the trustees, and under the sanction of his Honour the Vice-Chancellor Kinderaley. The time and place of sale, together with further particulars, will shortly appear. JOSEPH ANDERSON, Newcastle-upon-Tyne
May 11, 1863. (Solicitor to the Trustees).

TO BE SOLD, this month only, BY PRIVATE TREATY, SCORRIER CONSOLS MINE, MACHINERY, and PLANT, consisting of a new 30 in. ROTARY CONDENSING ENGINE, 9 ft. stroke, with BOILER, fly-wheel, pumping crank, and cage, complete; shears, 60 fms. pitwork, about 100 fms. flat-rods, chains, 2 horse whims, and the usual plant of a young mine in excellent working order.
To view, apply to Capt. DANIEL, on the mine; and to treat for the same, apply to Mr. TIMOTHY PAINTER, jun., Camborne.—May 16, 1863.
P.S.—Scorrier Consols Mine adjoins North Treskerby, within twenty minutes' walk of Scorrier station. Engine-shaft sunk only 60 fms. from surface, and well deserving further trial.

TO BE SOLD, BY PRIVATE TREATY, a small FREEHOLD PROPERTY, with the MINERALS thereunder, situate in TRYDDYN, near MOLD, NORTH WALES. The coal seams of the district have been proved by boring, and the Cannel is being worked at an adjoining colliery. Any quantity of adjacent land can be had on lease, and railway communication is nearly complete to the Mold branch.—Apply to T. L. COTTINGHAM, Mold.

TO BE SOLD, BY PRIVATE CONTRACT, the whole of the current going WORKS, situate at WHITEHILL POINT, near NORTH SHIELDS, in the county of NORTHUMBERLAND, consisting of FORGE, FOUNDRY, ENGINEERING, BOILER BUILDING, and CHAIN MAKING WORKS, all in perfect working order, together with the whole of the MACHINERY, TOOLS, &c., necessary for carrying on the above works.
Also, the whole of the HARTLEY ENGINE WORKS, situate at SEATON SLUICE, near NORTH SHIELDS, in the county of NORTHUMBERLAND, together with all the MACHINERY, TOOLS, &c., appertaining thereto.
Both the above works are situated within easy access of the principal manufactories and collieries in the counties of Northumberland and Durham, and thereby afford every facility for doing an extensive and lucrative business.
For inventory, terms of purchase, &c., application to be made to JOHN ROGERSON and Co., Newcastle, and 2, Royal Exchange-buildings, London, E.C.
N.B.—The above works, in all their branches, will be carried on until a sale is effected.

TO CAPITALISTS—PROFITABLE EMPLOYMENT OF CAPITAL IN WESTPHALIAN COAL PITS.—There are at present FOUR COAL FIELDS FOR SALE in the immediate neighbourhood of some of the most famous pits in Westphalia, by which their condition, with regard to depth and thickness of the seams, has been ascertained as accurately as possible. They are traversed by railways and high roads, and quite close to a navigable tributary of the Rhine, and contain, according to technical calculations, to a depth of 100 fathoms, 80,000,000 scheffer, or 4,000,000 tons, of coal, and the same quantity would be produced from each following 100 fathoms. The coal fields extend over a mining area of about 1616 Prussian morgen, or about 1000 acres English.
The coals are of excellent quality, and not only fit for coking, but also for house and steam coals.
The working expenses have been calculated upon the highest scale that would under any consideration be paid, and the returns have been estimated upon the price which the coal would fetch under present unfavourable circumstances, yet the receipts would exceed the outlay by from 35 to 50 per cent.
The price demanded for the fields is very small, and a profit of from 15 to 20 per cent. per annum could be realised upon the entire necessary outlay, both for purchase money and working capital.
The coal market is not very lively at present, but a glance at the already finished and newly-projected railways in that district will at once convince the most doubtful that the demand for Westphalian coals will have many fold increased until the time the pit will be in working order. There are also numerous iron-foundries and similar establishments springing up in that district, which of course will operate favourably upon the coal market.
Applications addressed to "Westphalian Coal Mines," MINING JOURNAL Office, 26, Fleet-street, London, E.C., will be promptly replied to, with full particulars.

TO COAL AND IRONMASTERS, AND OTHER CAPITALISTS.

CHARITY COLLIERY, BEDWORTH, WARWICKSHIRE.—TO BE LET, and entered upon immediately, the whole of the VALUABLE MINES of COAL and IRONSTONE, now in full work at the above colliery.
These mines are well worthy the attention of capitalists desirous of embarking in mining speculations, as a large area of coal is already opened out, and the present plant may be extended by a moderate outlay through the shafts already sunk, to win the remaining portion of coal, which consists of upwards of 70 acres of fully 20 feet thick of marketable coal.
This colliery is situate at Bedworth, in the county of Warwick, in the middle of a populous neighbourhood, being distant from Coventry only five miles, from Nuneaton three, and from Atherstone seven.
The Coventry Canal passes through the colliery, as also does the Coventry and Nuneaton branch of the London and North-Western Railway, affording a cheap outlet for the products of these mines to all parts of the kingdom.
The coal is of a superior quality, and much sought after as fuel for furnaces, brickyards, and locomotive engines on railways, as well as for general domestic purposes.
The ironstone is of a very rich quality, yielding a large percentage of good malleable iron, and is exported in large quantities from the works to the smelting furnaces in South and North Staffordshire, where it is found to combine with advantage with the other ironstones which are smelted at those works.
For a view of the colliery, apply to Mr. I. P. EVANS, of Griff, near Nuneaton, the bailiff to the Governors of Bedworth Hospital (who are the proprietors of the colliery), at whose office can be seen plans of the colliery and estate; and for any further particulars to Messrs. WOODHOUSE and JEFFCOCK, mining engineers, Derby; and to me, at my office in Bayley-lane, Coventry. CHARLES WOODCOCK,
Clerk to the Governors of Mr. Nicholas Chamberlaine's Charity in Bedworth.
Coventry, April 20, 1863.

TO BE LEASED, and may be entered upon immediately, a very ELIGIBLE COLLIERY and FIRE-CLAY WORKS, situate about three miles from WAKEFIELD.—For particulars, enquire of Mr. JAS. FAWCETT; or of Mr. S. R. CARRINGTON, Stockport.

Tavistock Ironworks, Devon.—(Established 1804.)

GILL AND CO., ENGINEERS AND IRONFOUNDERS, MANUFACTURERS of STEAM ENGINES and BOILERS. CHAINS of ALL DIMENSIONS. STEELED SHOVELS to any pattern. EVERY DESCRIPTION of CAST and HAMMERED IRON for MINING, MANUFACTURING, and AGRICULTURAL PURPOSES.
HAMMER MILLS. EDGE TOOL MANUFACTORY.
FOREIGN MINES SUPPLIED ON LIBERAL TERMS.
VARIOUS DESCRIPTIONS of SECOND-HAND MACHINERY CONSTANTLY ON HAND.
N.B.—AGENTS for TANGEY'S PATENT HYDRAULIC LIFTING JACK, and WESTON'S PATENT DIFFERENTIAL PULLEY BLOCKS.

WILLIAM MATHEWS, ENGINEER, TAVISTOCK, has FOR SALE:—ONE 30 in. CORNISH PUMPING ENGINE, with BOILER 9 tons; ONE 14 in. HORIZONTAL WHIM ENGINE and cage, with BOILER 4½ tons; TWO 10 horse PORTABLE ENGINES, for winding or pumping; ONE CORNISH CRUSHER; ONE 30 ft. diameter WATER WHEEL, 9 ft. breast, iron axle, sockets and rings; 60 fms. of 3 in. flat-rods, with pulleys.

TO PROPRIETORS OF SMELTING WORKS.—A LARGE COMPLEX of BROWN IRON ORE PITS, of only 1½ hour's distance from the Rhine, with convenient communication, is TO BE SOLD BY PRIVATE CONTRACT, on advantageous conditions. The various pits are provided with shafts, stulms, and water conduits, and can be set to work immediately. The product is one of the best brown iron ores of Nassau. Some of the pits furnish iron ore containing manganese, and another lead and silver ore.—For further particulars, apply to SCHROEDER and STADELMANN, Grenzhausen, near Coblenz, manufacturers of earthy and mineral colours.

TO BE SOLD, FORTY OLD RAILWAY WAGONS, carrying about 4 tons each. They have good springs, 3 ft. wheels, wrought-iron tyres, wrought-iron axles, from 3⅝ to 3⅞ through boss, and 3½ in. through middle, axle boxes and brasses, and falling doors the full length of the sides. Would be very suitable for contractors' purposes, and for carrying materials along branch lines to collieries, ironworks, &c. Price £15 each.—Address, "Wagons," MINING JOURNAL office, 26, Fleet-street, London, E.C.

NORTH DERBYSHIRE MINES, CALVER SOUGH, NEAR SHEFFIELD.

FOR SALE, BY PRIVATE CONTRACT, a highly polished 70 in. cylinder CORNISH PUMPING ENGINE, 12 ft. stroke, with THREE LARGE BOILERS. Also, a 22 in. cylinder HIGH PRESSURE ENGINE and TWO BOILERS. A powerful capstan and rope, and shear legs, 35 fms. of 24 in. pumps, 30 fms. of 14 in. pumps, 17 fms. of 10 in. pipes, 26 fms. of 15 in. pumps, 26 fms. of 12 in. pumps, and a large quantity of other miscellaneous articles suitable for mining purposes.—For particulars, apply to Mr. FAIRBURN, Hartshead, Sheffield; or to Messrs. WHARTON and SONS, engineers, Chesterfield.

CONENISH LEAD MINES, TYNDRUM, PERTHSHIRE.—These VALUABLE MINES will be LET, with immediate entry, for such term of years as may be agreed on. Samples of the ore from three different places on the estate were recently analysed and assayed by an eminent chemist, with the following results:—

By assay, No. 1 gave metallic lead 50 per cent., silver 8 1-10 ozs. per ton of ore.
" 2 " 66 " " 8½ " " "
" 3 " 58¼ " " 4½ " " "

It will thus be seen that the ore is rich both in lead and silver; barytes in a tolerably pure state has also been found. The mines are situated about thirteen miles north from Loch Lomond, to which there is a turnpike-road, and from whence transport to all parts of the kingdom may be had by water and rail.
For further information, apply to CHARLES W. L. FORBES, solicitor, Aberfeldy, N.B., who will give directions for showing the mines, and receive offers.
Aberfeldy, April, 1863.

DINAS FIRE-BRICKS.—MESSRS. FREDERICKS AND JENNER beg to offer these well-known bricks, either at their Dinas Bridge or Kidwelly Works, and can safely recommend them as EQUAL, if not SUPERIOR, to ANY FIRE-BRICKS MANUFACTURED, having the highest testimonials from the largest copper smelters and consumers in the world.—Full particulars, with testimonials, prices, &c., can be had on application to their agent, Mr. GEORGE YOUNG, Briton Ferry, South Wales; the Dinas Bridge Brick Works, Glyn Neath; Kidwelly Brick Works, Kidwelly; or Messrs. EASTWOOD, Belvidere-road, London.

SALE OF BASTIER'S CHAIN PUMP PATENT.—Mr. J. U. BASTIER is DESIROUS of FINDING a PARTNER for CONTINUING the DEVELOPMENT of his ENGLISH PATENT for his CHAIN PUMP, or he is WILLING to SELL the ENTIRE or PART of HIS INTEREST therein. He proposes to grant four exclusive licenses for the full term of the patent, for England, Scotland, Ireland, and Wales respectively:—
For the license for England, he demands the sum of £2000 for the unreserved transfer, or £1000 if 25 per cent. of the nett profits be secured to him.
For the license for Scotland, he demands £1500 for unreserved sale, or £750 with 25 per cent. of profits.
For the license for Ireland, he demands £1400 for unreserved sale, or £700 with 25 per cent. of profits.
And for the license for Wales, he demands £1200 for unreserved sale, or £600 with 25 per cent. of profits.
Address, J. U. BASTIER, C.E., 47, Warren-street, Fitzroy-square, London.

To Silver and Gold Miners.

THE CONCENTRIC BELL AMALGAMATING AND WASHING MACHINE.
WILLIAM REAY, JUN., has the honour to inform his friends and the mining public that he has recently patented, under the above name, a perfectly NEW DESCRIPTION of MACHINE for AMALGAMATING GOLD and SILVER ORES, and for SEPARATING the GLOBULES of QUICKSILVER and AMALGAM, which remain in the residues from other systems of amalgamation.
One of these small machines, of 4 ft. 6 in. (outer bell) diameter, will easily amalgamate 6 to 8 tons of ore (in bulk) per day, with less than 1 horse power; and, if placed below a circular battery of stamps of six heads, could be worked by the same spindle, and amalgamate all the pulverised ore thence proceeding.
The gold is first forced through a column of 6 in. of mercury; then, if not absorbed, it is gently rubbed by the floating balls, and, thus cleaned, passes through three columns of mercury of 2 inches each, before it can escape from the apparatus, in which upwards of 15,000 square feet of cleaned mercury are displayed per minute, over and through which the 6 to 7 lbs. of ore per minute have to pass!
Parties desirous of availing themselves of this machine will meet with prompt attention by addressing their letters to WM. REAY, Jun., Thropton Hill, Rothbury, Northumberland; or to him, care of W. S. HOLT, Esq., Marine Brewery, Ratcliff-cross, London, E.—April 27, 1863.

IMPORTANT TO MINING COMPANIES.

SMYTH AND WASLEY'S MACHINERY FOR SPALLING AND SEPARATING THE ORE FROM THE STONE, &c.
A NEW and USEFUL MACHINE, termed a PREPARATOR, has recently been patented by Messrs. SMYTH and WASLEY, having for its objects the SPALLING and SEPARATING the ORE from the STONE, and FORMING it into PROPER SIZES for PICKING, JIGGING, CRUSHING, &c., according to the nature and quality of the stuff.
The construction is simple, the bed on which the stuff is broken being made of cast-iron plates, about 14 in. deep, 2 in. wide on the top, and narrowing downwards, with wrought-iron steeled edge bars on the top, the plates and bars being from 1¼ in. to 2 in. apart, and can be regulated to any size, as may be required, through which plates the stuff passes as it is broken with the hammers unto perforated plates, which form it into different sizes, from 1¼ in. cube downwards, which plates can also be regulated as may be required. The machine can be erected in connection with other machinery for about £15 per hammer, as driving power. Two, three, four, or any number of hammers may be had as required. Four of from 4 to 5 cwts. each will break about 1000 tons per month.
This invention well deserves public notice, as it will decidedly effect an economy of 70 per cent. over manual labour, together with a great advantage in the dispatch of work, performing it far better than any other mode yet introduced, and several practical gentlemen, who have seen it at work at the Coed Mawr Pool Mines, fully corroborate the above statement.
The charge for patent right will be on the most advantageous terms.
The largest mine in the kingdom may exercise its full use at 5*l.* per month, and the charge to be reduced proportionately according to the magnitude of the works, or the patent may be sold off to each mine district or county, as might be agreed on.
For future particulars, apply to Messrs. SMYTH and WASLEY, Coed Mawr Pool Mines, Llanrwst, North Wales; or to G. I. SOPER, Esq., 25A, Bucklersbury, E.C., London.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED for MINING PURPOSES. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.
Copper wire covered with silk, cotton, or any other material, to order.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE.

CREASE'S PATENT EXCAVATING MACHINERY, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.
Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.
Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE, Dolgelly, North Wales.
By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

International Exhibition, 1862.

CLASS IX.—PRIZE MEDAL for AGRICULTURAL PORTABLE STEAM ENGINES and MACHINERY.
CLASS VIII.—PRIZE MEDAL for HORIZONTAL HIGH PRESSURE STEAM ENGINES.
For "Good arrangement, good workmanship, and practical success."

CLAYTON, SHUTTLEWORTH, AND CO.,
ENGINEERS,
MANUFACTURERS of PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, and AGRICULTURAL PURPOSES, &c., adapted for any part of the world.
STAMP END WORKS, LINCOLN; and
78, LOMBARD STREET, LONDON.
Descriptive, illustrated, and priced catalogues free per post. 140

Prize Medal, International Exhibition, 1862.

AVELING AND PORTER'S PATENT TRACTION ENGINES AND LOCOMOTIVES FOR MINERAL RAILWAYS.
For prices, illustrated description, and testimonials, apply to AVELING and PORTER, engineers, Rochester, Kent. 141

International Exhibition, 1862—Three Prize Medals for Mechanical Rubber.

[S]OUTH BRITISH RUBBER COMPANY (LIMITED),
CASTLE MILLS, EDINBURGH.
WAREHOUSE,—56, CANNON STREET WEST, LONDON, E.C.
MANUFACTURERS of VULCANISED INDIA-RUBBER for MECHANICAL ENGINEERING, RAILWAY, and AGRICULTURAL PURPOSES.
PARMELEE'S PATENT INDIA-RUBBER MACHINE BELTING, now in use in most of the principal factories in Great Britain, and which was employed by H.M. Commissioners of the Exhibition of 1862 upon all their engines in the Western Annexe, besides driving over fifty other machines belonging to exhibitors. Its superiority over all other belting consists in its perfectly even surface, combined with sufficient elasticity to enable it to "hug" the pulley, preventing slipping, and thus effecting a great saving of power. It will not stretch in damp or wet places, and, unlike leather, is not affected by exposure to the weather, thus rendering it invaluable for paper works, saw mills, threshing machines, &c. It can be made of any size or strength for main driving bands, and at one-third the cost of leather. All belts are stamped with the company's name, and are warranted.
INDIA-RUBBER DELIVERY and SUCTION HOSE does not require drying after use, never rots, always flexible, no loss of power by leakage, and can be made of any size and to stand any pressure. The only hose which is strong enough to be used on steam fire-engines.
VALVES for MARINE and LAND ENGINES, up to 6 ft. in diameter.
WASHERS and SHEET RUBBER for STEAM, WATER, GAS, and AIR JOINTS.
BUFFERS, BEARING SPRINGS, and DRAW SPRINGS for RAILWAYS.
DECKLE STRAPS for PAPER MAKERS, insuring a perfect edge, and wasting no pulp. BREAST APRONS for PAPER MACHINES.
TUBING for CONVEYING ACIDS and OTHER LIQUIDS, GAS, &c.
CORD-PISTON PACKING—INSERTION RUBBER GAS BAGS, for REPAIRING MAINS.
BILLIARD and BAGATELLE STRIPS, RINGS, &c.
VULCANISED INDIA-RUBBER MOULDED to ANY FORM. All the above are manufactured without the use of solvents, whereby the strength of the rubber is retained permanently. INTERNATIONAL EXHIBITION, 1862.
Three medals awarded for "Practical Utility and Success, and Excellence of Quality." This company are the only manufacturers in Great Britain to whom medals were awarded for mechanical rubber. 164

WASTE NO OIL.

STRONG IRON OIL CISTERNS,
NOT LIABLE TO LEAK, and ECONOMISE SPACE in the STORES:—

	Dia.	Height.	£				Dia.	Height.	£		
500 gallons	48	84	10	10	0	75 gallons	27	42	3	15	0
400 „	43	83	9	9	0	50 „	24	36	2	15	0
300 „	37	84	7	7	0	40 „	21	38	2	5	0
252 „	35	79	6	10	0	30 „	21	30	1	15	0
200 „	33	72	6	0	0	25 „	19	30	1	5	0
150 „	30	66	5	5	0	20 „	19	26	1	2	0
100 „	27	55	4	10	0	10 „	15	21	0	15	0

STRONG IRON BUCKETS:—

2½ gallons	4s. 6d.	3½ gallons	5s. 6d.
3 „	5 0	4 „	6 0

WAGON GREASE, in 4 and 8 cwt. casks.
TURPENTINE SUBSTITUTE, 3s. per gallon, in 30-gallon casks.

TO IRON AND COAL MASTERS, &c.

IMPROVED BLACK VARNISH,
FOR PREVENTING IRON FROM RUST, AND WOOD FROM DECAY.
A brilliant jet black, superior to paint in appearance, dries in less time, contains preservative qualities of the best description, and is economical in its use: one gallon at 1s. is equal to 14 lbs. of paint, which costs 4s.
For COLLIERY HEAD GEARING, RAILWAY WAGONS, BOILERS, CASTINGS, CANAL BOATS, &c., it is especially adapted. In casks containing 10, 15, and 20 cwts. each. In quantities of 1 ton and upwards, price £11 per ton.
GLOVER AND CO.,
No. 40 MANESTY LANE, LIVERPOOL. 143

CARSON'S ORIGINAL ANTI-CORROSION PAINT.
It is extensively used at home and abroad for all kinds of
OUT-DOOR WORK,
and will be found a most efficient and economical preservative for
HEAD GEARING OF COLLIERIES, MINES, WOOD AND IRON WORK of all descriptions; also
TRUCKS, WAGONS, ETC., ETC.,
Lasting twice as long as the best common paints in exposed situations, being manufactured expressly for external purposes.
ANY PERSON CAN LAY IT ON, and its superiority may be inferred from the opposition with which its use has been met by those interested in the sale of ordinary paints. (No grinding is requisite.)
ALL COLOURS.
FIVE CWTS. AND UPWARDS, CARRIAGE FREE, TO ANY STATION IN ENGLAND AND WALES, AND PER STEAMER TO MOST PORTS IN ENGLAND AND SCOTLAND. Patterns, prices, also copy of testimonials, will be sent on application to
WALTER CARSON AND SONS,
(Successors to the Inventors),
9, GREAT WINCHESTER STREET (NEAR THE ROYAL EXCHANGE),
LONDON, E.C.
NO AGENTS THROUGHOUT THE UNITED KINGDOM. 143

BASTIER'S PATENT CHAIN PUMP.
APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.
J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects armers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—
1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.
A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.
J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION.
OFFICES, 47, WARREN STREET, FITZROY SQUARE.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER, C.E. 144

THE MINING REVIEW, AND JOURNAL OF COMMERCE, TRADE AND MANUFACTURE, SCIENCE AND THE ARTS.
Wednesday, March 26, 1862. Subscription, £1 1s. annually. Price 6d. stamped.

RAILWAYS AND MINES,
Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range for profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £15 to £35 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to railways and mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.
MESSRS. TREDINNICK AND CO., STOCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C. 145

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.
The best medium for mining, manufacturing, shipping, and trading advertisements in the North of England.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland, 140

BY HER MAJESTY'S ROYAL LETTERS PATENT.

GEORGE SPILL & CO.'S IMPROVED MACHINERY BELTING,
WARRANTED NOT AFFECTED BY HEAT, WATER, OR GREASE, AND MADE TO ANY LENGTH IN ONE PIECE.
PRICES PER FOOT RUN.

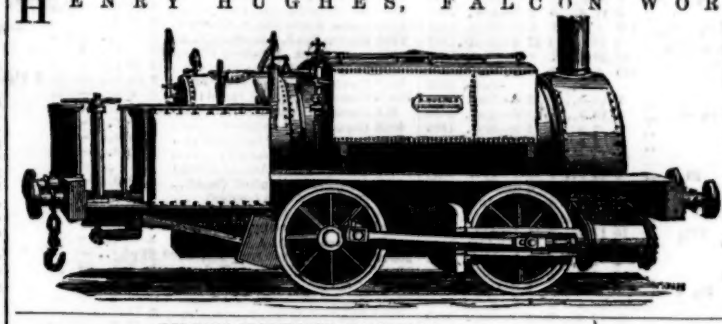
Inches wide.	1	1½	2	2½	3	3½	4	4½	5	5½	6	7	8	9	10	11	12
No. 1 substance.	0 3	0 4½	0 6	0 7½	0 9	0 10½	1 0	1 1½	1 3	—	—	—	—	—	—	—	—
No. 2 substance.	—	—	—	0 11½	1 1½	1 4	1 6	1 7½	1 9	1 10½	2 0	2 3	2 6	2 9	3 0	—	—
No. 3 substance.	—	—	—	—	1 6	1 7½	1 9	1 10½	2 0	2 3	2 6	3 0	3 6	4 0	4 6	5 0	5 6.

These Beltings (unlike the ordinary manufactures) are woven into one solid substance from the best flax yarn, and saturated with a compound to consolidate them, which is not liable to decomposition. They possess extraordinary strength, as the following certificate will verify, which renders them particularly adapted for paper and saw mills threshing machines, grain elevators, foundries, machine shops, &c.
COPY OF CERTIFICATE, FROM THE PORT OF LONDON CHAIN CABLE PROOF HOUSE.
THIS IS TO CERTIFY, that the tensile strength of Machinery Belting, manufactured by GEO. SPILL AND CO., of HACKNEY WICK, LONDON, as proved by my chain cable testing machine, at Rotherhithe, to be as follows, viz.:—

No. 1 substance	5 in. wide, broke at the strain of	6,272 lbs., or, for every inch of width,	1254	lbs.
No. 2	5 in. wide, „	7,448 lbs., or, for every inch of width,	1489	lbs.
No. 3	10 in. wide, „	16,663 lbs., or, for every inch of width,	1666½	lbs.
A stout leather band	4 in. wide, „	2,100 lbs., or, for every inch of width,	525	lbs.

July 9, 1862. (Signed) WM. MITCHESON.
Manufacturers of India rubber. Double texture and oiled waterproof cart, rick, and wagon sheets, made up at price per square yard. Farmers' gaiters, buskins, and farm labourers' waterproof garments.
WORKS, HACKNEY WICK, N.E.;
DEPOT, 149, CHEAPSIDE, E.C., LONDON, AND 9, HIGH STREET, BRISTOL. 161

HENRY HUGHES, FALCON WORKS, LOUGHBOROUGH.



This LOCOMOTIVE ENGINE has been DESIGNED expressly for CONTRACTORS and MINERAL RAILWAYS. It is VERY STRONG in EVERY PART, and, being mounted on small wheels close together, will MOUNT STEEP GRADIENTS and TURN SHARP CURVES.
The BOILERS are of the BEST PLATES, with fire-boxes of Low Moor, are clothed with hair felt, lagged and covered with sheet iron, and PROVED to a PRESSURE of TWO HUNDRED POUNDS PER SQUARE INCH.
The TYRES are of the BEST YORKSHIRE IRON, and of GREAT THICKNESS. The tank contains 250 gallons.
The FITTINGS consist of BUFFERS, POWERFUL BRAKE, GIFFARD'S INJECTOR, ROSCOE'S OILING APPARATUS, PRESSURE GAUGE, WATER GAUGE, and BLOWER to GET UP STEAM.
The engines are all tried before leaving the works, and an experienced man sent with them free of cost.
Full specification on application.
10 in. cylinders, 15 in. stroke, price £500. 162

BEDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description. 147

ELLIS LEVER, INVENTOR and MANUFACTURER of the IMPROVED SAFETY BRATTICE and FLEXIBLE TUBING,
23, MARSDEN SQUARE, MANCHESTER:
MANUFACTORY,—WEST GORTON WORKS, MANCHESTER. 166

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO.,
MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE. 149

RAILWAY STONE AND COAL WAGONS TO BE LET.—
Apply to Messrs. W. L. and T. UNDERHILL, Tipton. 150

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER. 151

BIRMINGHAM WAGON COMPANY (LIMITED).
OFFICES,—3, NEWHALL STREET, BIRMINGHAM.
Mr. J. H. CHANDLER, Secretary.
This company is PREPARED to SUPPLY RAILWAY CARRIAGES and WAGONS of EVERY DESCRIPTION for cash, or on deferred payments.
RAILWAY WAGONS FOR HIRE at annual rentals, or tonnage rates. Apply as above. 152

JOHN PICKERING AND CO., RAILWAY WAGON AND CARRIAGE BUILDERS.
WAGONS FOR SALE, HIRE, OR ON PURCHASE LEASE.
BRINSWORTH WAGON WORKS, ROTHERHAM. 153

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY o. COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. MCCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London. 154

WILLIAM J. SMITH, ENGINEER AND CONTRACTOR, BELMONT, near DURHAM, UNDERTAKES the SINKING of PITS, also the SUPPLYING, ERECTING, REMOVING, and COMPLETION of EVERY DESCRIPTION of COLLIERY and MINING WORK. 155

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 25 to 50 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen. 156

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID,
FOR REMOVING AND PREVENTING
INCRUSTATION IN STEAM BOILERS, LAND AND MARINE.
P. S. EASTON AND G. SPRINGFIELD,
Patentees and Sole Manufacturers,
37, 38, and 39, WAPPING WALL, LONDON, E.,
Or of their Agents in the principal towns of Great Britain and the Colonies. 157

TO ENGINEERS, COLLIERY OWNERS, AND OTHERS.

POW AND FAWCUS, CHAIN MANUFACTURERS, ANCHORSMITHS, and FOUNDERS, at NORTH SHIELDS IRONWORKS, beg to inform their friends and the public that they have taken, in addition to their works at North Shields, WINLATON ROLLING MILL and SWALWELL IRONWORKS, lately occupied by the old established firm of CROWLEY, MILLINGTON, AND CO., where they intend to make iron, steel forgings, castings, and the various other articles manufactured by the late firm. They expect, by employing first-rate workmen, and by paying particular attention to the quality of the goods manufactured, to keep up the good reputation enjoyed by their predecessors.—North Shields, May 1, 1863. 158

PUBLIC TEST OF WIRE-ROPE.—
The SUPERIOR QUALITY of GARNOCK, BIBBY, AND CO.'S WIRE-ROPE was FULLY PROVED by a RIVAL MANUFACTURER at the LIVERPOOL PUBLIC TESTING MACHINE, on the 29th of October, 1860, on which occasion GARNOCK, BIBBY, and Co.'s ropes were found to be the STRONGEST of all the TWELVE SAMPLES from different makers then tested, as reported in the papers of the day. For example:—
(Certified by Mr. William Macdonald, superintendent.)

Sizes.	Garnock, Bibby, and Co. Tons c.	Corresponding sizes from other manufacturers. Tons c.	Tons c.
3½ in.	18 5*	16 10	11 10
2½ in.	8 15*	7 15	5 0

Remaining sizes with similar results.
* Samples taken promiscuously from stock by a rival manufacturer's agent.
GARNOCK, BIBBY, AND CO.,
SWAN HEMP AND WIRE ROPE MANUFACTURERS,
LIVERPOOL.
FLAT and ROUND STEEL and IRON WIRE ROPES for MINES, &c., of SUPERIOR QUALITY. 159

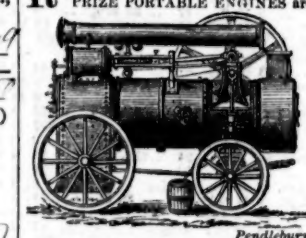
NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,
MANUFACTURED by GEORGE LOW,
MILLGATE IRONWORKS, NEWARK-UPON-TRENT,
Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.
The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.
G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.
MANUFACTURER of WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.
IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.
G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also,
MANUFACTURER of IMPROVED BORING MACHINES for DRIVING ADITS. 160

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S. 163

Prize Medal, International Exhibition, 1862.

RUSTON, PROCTOR, AND CO.'S CELEBRATED PRIZE PORTABLE ENGINES are SPECIALLY ADAPTED for WINDING, PUMPING, SAWING, &c. These engines have, in public competition, won the highest honours. For ECONOMY in WORKING, LARGE ALLOWANCE of POWER in CYLINDER AREA and PROPORTIONATE SIZE of BOILER, STRENGTH of CONSTRUCTION, HIGH FINISH, and GENERAL EFFICIENCY, they are unrivalled, having recently been AWARDED THIRTEEN GOLD, SILVER, and BRONZE PRIZE MEDALS, And numerous other prizes.



Messrs. A. Knowles and Sons write:—
Pendlebury Colliery, near Manchester, June 5, 1861.
GENTLEMEN,—We beg to inform you tha twe have now in use the portable engine of 8 horse power you supplied us with, and have great pleasure in informing you that it works well, and we are much pleased with the workmanship and finish of it.
We are, yours respectfully, ANDREW KNOWLES AND SONS.
Illustrated, descriptive, and priced catalogues may be had on application to the Sheaf Ironworks, Lincoln. 164

Prize Medals—International Exhibition, Class 1 and 2.

PATENT PLUMBAGO CRUCIBLES.—
The CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Arsenals of Woolwich, Brest, and Toulon, &c.; and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pourings of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.

The company have recently introduced CRUCIBLES SPECIALLY ADAPTED for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working of which has proved to be about seven days; STEEL MELTING, which are found to save nearly 1¼ ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting much longer than the ordinary iron pots, and saving the great loss which arises from mixture with iron.
For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea Works, London, S.W.
Fully described in the MINING JOURNAL of July 5. 165

MESSRS. KNOWLES AND BUXTON, CHESTERFIELD, MANUFACTURERS OF PATENT TUBULAR TUYERES.

The PATENT TUBULAR TUYERE possesses GREAT ADVANTAGES over the ORDINARY TUYERES, both for its DURABILITY and EASY WORKING. A current of cold water going direct to the nozzle prevents their destruction, however much they may be exposed to the fire.
We repair them at half the first cost, making them equal in size to new ones, all parties returning them carriage paid.

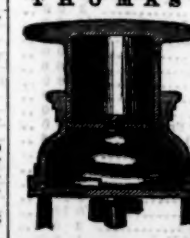
No. 1 tuyere,	16 in. long	28s.	each.
No. 2 „	18 „	32s.	„
No. 3 „	20 „	36s.	„
No. 4 „	22 „	40s.	„
No. 5 „	24 „	44s.	„

Delivered at Chesterfield station. Terms, nett cash quarterly. 166

BARCLAY'S PATENT STEAM AND WATER PRESSURE AND VACUUM GAUGES.
These GAUGES are MADE to INDICATE ANY PRESSURE from ONE to TWENTY THOUSAND POUNDS upon the SQUARE INCH.
EACH GAUGE is GUARANTEED FOR FIVE YEARS.

PATENTEE AND MAKER,
ANDREW BARCLAY,
ENGINEER,
KILMARNOCK. 167

THOMAS TURTON AND SONS, MANUFACTURERS OF
CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS, and
FORGINGS of EVERY DESCRIPTION.



DOUBLE SHEAR STEEL,	FILES MARKED
BLISTER STEEL,	T. TURTON.
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Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.
Illustrated Catalogue, with Prices, forwarded on receipt of 12 stamps.
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DR. SMITH has just published a free edition of his valuable work, the PRIVATE MEDICAL FRIEND (116 pages), on the Self Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the errors of youth. Sent post free to any address, on receipt of a directed envelope, enclosing two postage stamps.—Address, DR. SMITH, 8, Burton-crescent, Tavistock-square, London W.C. 169

THE MINING SHARE LIST

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last Paid.
1000	Alderley Edge (Cheshire) [L.]*	10 0 0..	— ..	..	.. 7 18 6.. 0 10 0	—May, 1862
4000	Bedford United (copper), Tavistock†	2 6 8..	— ..	..	.. 13 0 0.. 0 2 6	—Dec. 1862
240	Boscean (tin), St. Just†	20 10 0..	— ..	..	.. 36 10 0.. 1 0 0	—Mar. 1862
200	Botallack (tin, copper), St. Just	91 5 0..	— ..	..	.. 455 15 0.. 6 0 0	—Nov. 1862
8000	Bronfloyd (lead), Cardigan [L. £3]	2 7 6..	— ..	..	.. 0 9 0.. 0 2 0	—April, 1863
916	Cargoll (silver-lead), Newlyn	15 5 7..	— ..	40 41	.. 3 10 0.. 1 5 0	—May, 1863
1000	Carn Brea (copper, tin), Illogan†	15 0 0..	— ..	..	.. 278 10 0.. 2 0 0	—Feb. 1862
3000	Chiverton (lead), Perranzabuloe	— ..	— ..	..	.. — .. — ..	—
256	Copper Hill (copper) Redruth	48 0 0..	86 ..	82 84	.. 9 10 0.. 2 10 0	—Sept. 1862
12000	Copper Miners of England	25 0 0..	— ..	..	.. 7½ per cent.	— Half-yrly.
350000	Ditto ditto (stock) ..100	0 0 0..	— ..	..	.. 1 per cent.	— Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0..	— ..	..	.. 7 12 0.. 0 4 0	—July, 1862
512	Creegbrawse and Penkevil, St. Colomb	— ..	— ..	..	.. 0 10 0.. 0 10 0	—Jan. 1862
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0..	— ..	..	.. 8 8 0.. 0 10 0	—April, 1863
128	Cwmystwith (lead), Cardiganshire*	60 0 0..	— ..	..	.. 251 10 0.. 4 0 0	—Mar. 1863
260	Derwent Mines (sil.-lead), Durham	300 0 0..	— ..	..	.. 147 0 0.. 5 0 0	—June, 1862
1024	Devon Gt. Con. (copp.), Tavist.* [S.E.]	1 0 0.. 520 ..	525 535	..	.. 854 0 0.. 9 0 0	—May, 1863
358	Dolcoath (copper, tin), Camborne*	128 17 6..	— ..	..	.. 769 10 0.. 8 0 0	—April, 1863
12800	Drake Walls (tin, copper), Calstock	2 1 0.. 2¼ ..	2 2¼	..	.. 0 16 6.. 0 1 6	—Feb. 1863
3000	Dyfngwm (lead), Wales	12 6 8.. 12 ..	..	..	.. 0 17 6.. 0 2 6	—Jan. 1863
512	East Basset (cop.), Redruth [S.E.]*	29 10 0.. 100 ..	102¼ 107½	..	.. 107 0 0.. 1 0 0	—Mar. 1863
3144	East Caradon (copper), St. Cleer [S.E.]	2 14 6.. 36¼ ..	31½ 32½	..	.. 6 15 0.. 0 17 6	—April, 1863
300	East Darren (lead), Cardiganshire*	32 0 0.. — ..	..	..	.. 85 10 0.. 1 0 0	—Mar. 1863
128	East Pool (tin, copper), Pool, Illogan	24 5 0.. — ..	..	..	.. 330 0 0.. 5 0 0	—April, 1863
2800	Foxdale (lead) Isle of Man [L.]	25 0 0.. — ..	..	..	.. — .. — ..	—July, 1862
5000	Frank Mills (lead), Devon	3 18 6.. — ..	..	..	.. 0 16 0.. 0 2 0	—Mar. 1862
1798	Great Wheal Fortune (tin), Breage	18 4 0.. 36 ..	35 36	..	.. 4 10 0.. 0 15 0	—May, 1863
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0.. — ..	..	..	.. 2 7 6.. 0 5 0	—Mar. 1863
10240	Gunnis Lake (Clitters' Adit)	0 2 0.. — ..	..	..	.. 0 3 0.. 0 1 6	—Mar. 1862
1024	Herodsfoot (id.), near Liskeard [S.E.]	8 10 0.. — ..	..	..	.. 23 5 0.. 1 15 0	—Feb. 1863
1000	Hibernian Mine Company	92 6 2.. — ..	28	..	.. 9 15 0.. 0 15 0	—Feb. 1863
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0.. — ..	..	..	.. 403 10 0.. 4 0 0	—Mar. 1863
9000	Marke Valley (copper), Caradon	4 10 6.. 7¾ ..	6¼ 7	..	.. 2 8 6.. 0 2 0	—April, 1863
1800	Minera Mining Co. [L.], (id.), Wrexham	35 0 0.. — ..	..	..	.. 114 18 0.. 7 0 0	—May, 1863
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0.. 20 ..	19¾	..	.. 15 17 7.. 0 11 2	—Jan. 1863
640	Mount Pleasant (lead), Mold	4 0 0.. — ..	..	..	.. 18 18 1.. 0 7 6	—Aug. 1862
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 10 0.. — ..	..	..	.. 0 2 0.. 0 2 0	—Mar. 1863
250	Nanty Mines (lead), Montgomery	20 0 0.. — ..	..	..	.. 1 0 0.. 1 0 0	—Mar. 1863
5936	North Treskerby (copper), St. Agnes	1 9 0.. 4 ..	3¼ 4	..	.. 0 6 0.. 0 1 6	—April, 1863
5000	Orsedd (lead), Flintshire	0 0 8.. — ..	..	..	.. 0 10 4.. 0 0 8	—Mar. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6.. — ..	..	..	.. 36 19 0.. 0 2 6	—Mar. 1863
207	Parys Mines (copper), Anglesey [L.]	50 0 0.. — ..	..	..	.. 57 10 0..10 0 0	—Jan. 1863
1772	Polberro (tin), St. Agnes	— .. — ..	..	..	.. 7 9 6.. 0 10 0	—April, 1863
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7.. 43 ..	41 42	..	.. 67 5 0.. 1 0 0	—Feb. 1863
6000	Rosewall Hill and Ransom United	2 16 0.. — ..	..	..	.. 0 8 6.. 0 2 6	—Sept. 1862
16	Rhosesmor (lead)	50 0 0.. — ..	..	..	..1250 0 0..100 0 0	—Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0.. 410 ..	400 410	..	.. 400 0 0.. 4 0 0	—Mar. 1863
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0.. 52½ ..	47½ 50	..	.. 73 10 0.. 1 0 0	—May, 1862
8000	South Exmouth (lead), Christow	1 0 0.. — ..	..	..	.. 0 5 0.. 0 5 0	—Dec. 1862
496	S. Wh. Frances (cop.), Illogan* [S.E.]	18 18 9.. 87½ ..	80 85	..	.. 367 5 0.. 1 0 0	—May, 1863
1024	South Woodley	0 5 6.. — ..	..	..	.. 0 6 0.. 0 6 0	—June, 1862
280	Spearne Moor (tin, copper), St. Just	31 17 9.. — ..	..	..	.. 9 15 0.. 1 0 0	—June, 1862
940	St. Ives Consols (tin), St. Ives†	8 0 0.. — ..	..	..	.. 486 10 0.. 0 10 0	—May, 1863
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0.. 20 ..	19¾ 19¾	..	.. 12 8 6.. 0 5 0	—April, 1861
1000	Trumpet Consols (tin), near Helston	11 10 0.. 11 ..	..	..	.. 11 0 0.. 2 0 0	—Mar. 1862
4200	Vigra and Clogau (copper) [L. £5]	2 15 0.. 27 ..	35 37½	..	.. 4 12 6.. 1 0 0	—Oct. 1862
6000	West Basset (copper), Illogan [S.E.]	1 10 0.. 13 ..	..	..	.. 23 11 0.. 0 5 0	—Jan. 1863
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0.. 30 ..	26 28	..	.. 101 1 3.. 0 10 0	—Oct. 1862
3000	West Chiverton, (lead), Perranzabuloe	— .. — ..	19 20	..	.. — .. — ..	—
256	West Damsel (copper), Gwennap	38 10 0.. — ..	..	..	.. 46 0 0.. 1 0 0	—Jan. 1863
6400	West Fowey Consols (tin and copper)	7 10 0.. — ..	..	..	.. 0 19 0.. 0 3 0	—May, 1862
1024	West Penstruthal	4 0 0.. — ..	..	..	.. 2 19 6.. 2 19 6	—May, 1862
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0.. 260 ..	240 250	..	.. 378 0 0.. 5 0 0	—April, 1863
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6.. 67½ ..	..	..	.. 592 10 0.. 1 0 0	—Feb. 1863
1000	Wheal Basset and Grylls (tin)	7 0 0.. 27 ..	26 27	..	.. 2 0 0.. 1 0 0	—April, 1863
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0.. 24 ..	31½ 32½	..	.. 28 8 0.. 0 7 6	—Dec. 1862
1024	Wheal Grylls (tin), Perranuthnoe	2 4 0.. 30 ..	..	..	.. 4 2 0.. 1 0 0	—Mar. 1863
4800	Wh. Ludcott and Wray (lead), St. Ive.	2 10 8.. 5¾ ..	..	..	.. 3 4 6.. 0 2 6	—April, 1863
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6.. 32 ..	30 31	..	.. 75 5 0.. 1 0 0	—Nov. 1862
100	Wheal Mary (tin), Lelant	36 2 6.. — ..	..	..	.. 284 5 0.. 4 0 0	—Mar. 1862
1024	Wh. Mary Ann (id.), Menheniot [S.E.]†	8 0 0.. 16½ ..	..	..	.. 57 7 6.. 0 10 0	—Mar. 1863
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0.. — ..	..	..	.. 323 3 0.. 5 0 0	—May, 1863
896	Wheal Seton (tin, copper), Camborne	58 10 0.. 260 ..	240 245	..	.. 150 15 0.. 3 0 0	—April, 1863
1040	Wh. Trelawny (sil.-id.), Liskeard [S.E.]	5 17 0.. 17½ ..	..	..	.. 46 12 6.. 0 10 0	—Mar. 1863

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0..	— ..	..	.. 9 0 0.. 4 0 0	—April, 1861
256	Condurrow (cop., tin), Camborne	35 0 0..	— ..	100 110	.. 85 0 0.. 2 0 0	—June, 1857
2450	Cook's Kitchen (copper), Illogan	17 0 9..	27 ..	26 27	.. 1 7 0.. 0 7 0	—May, 1862
4076	Devon and Cornwall (copper)	5 16 3..	— ..	..	.. 0 10 0.. 0 2 6	—Feb. 1859
672	Ding Dong (tin), Gulval	40 18 6..	— ..	..	.. 16 7 6.. 1 10 0	—Mar. 1857
940	Fowey Consols (copper), Tywardreath	4 0 0..	— ..	..	.. 41 2 3.. 0 2 0	—Dec. 1860
5000	Kelly Bray (lead, copper), Callington	4 15 6..	— ..	1 ..	.. 0 6 0.. 0 2 0	—Feb. 1860
160	Levant (copper, tin), St. Just	2 10 0..	— ..	..	..1091 0 0.. 5 0 0	—May, 1860
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6..	— ..	..	.. 0 3 6.. 0 1 0	—Sept. 1861
470	Newtownards Mining Co., Co. Down	50 0 0..	— ..	..	.. 56 0 0.. 1 0 0	—Sept. 1858
400	Phœnix (copper and tin)	— ..	— ..	..	.. — .. — ..	—
4026	Rosewarne Consols (copper)	3 12 6..	— ..	..	.. 0 2 0.. 0 2 0	—Oct. 1862
9800	Tamar Con. (sil.-id.), Beeralston [S.E.]	4 10 0..	— ..	..	.. 5 6 0.. 0 2 6	—Jan. 1861
572	Treiyon Consols (tin), St. Ives	12 10 0..	— ..	..	.. 7 0 0.. 0 10 0	—Sept. 1860
1024	Wendron Consols (tin), Wendron	12 13 10..	— ..	13 13½	.. 8 15 0.. 1 0 0	—Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0..	— ..	..	.. 14 10 0.. 3 0 0	—June, 1861
256	Wheal Buller (cop.), Redruth [S.E.]	5 0 0..	55 ..	50 55	.. 929 0 0.. 2 0 0	—Mar. 1861
128	Wheal Friendship (copper), Devon	50 0 0..	— ..	..	..2400 10 0.. 5 0 0	—Feb. 1861
1024	Wheal Hearle (tin), St. Just	9 18 8..	— ..	..	.. 0 5 0.. 0 5 0	—May, 1862
512	Wheal Jane (silver-lead), Kea	3 10 0..	— ..	..	.. 13 10 0.. 1 0 0	—Mar. 1862
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6..	9 ..	..	.. 8 10 0.. 0 10 0	—April, 1862
4295	Wheal Kitty (tin), St. Agnes	5 4 6..	— ..	7¼	.. 0 18 6.. 0 2 0	—July, 1860
5000	Wicklow (copper) [L.], Wicklow	5 0 0..	— ..	40½	.. 43 17 6.. 2 0 0	—Oct. 1861

FOREIGN MINES.

2464	Burra Burra (cop.), South Australia	5 0 0..	— ..	..	.. 305 0 0.. 5 0 0	—Feb. 1863
6000	Central American (silver) [L.]	5 0 0..	— ..	..	.. 2 2 9.. 0 14 6	—Oct. 1862
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0..	20 ..	18 20	.. 98 12 0.. 1 0 0	—Jan. 1862
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0..	— ..	..	.. 6 16 0.. 0 10 0	—Nov. 1862
18000	East Indian Coal, Calcutta [L.]	10 0 0..	— ..	..	.. 7½ per cent.	— Yearly.
70000	English and Australian [S.E.]	5 0 0..	— ..	..	.. 1 7 6.. 0 2 6	—Feb. 1862
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0.. 4¾ ..	4¼ 4¾	..	.. 0 8 4.. 0 3 4	—Mar. 1863
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0.. 22 ..	..	..	.. 19 5 0.. 1 0 0	—June, 1862
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0.. 1¼ ..	..	..	.. 0 10 0.. 0 1 0	—June, 1862
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0.. — ..	..	..	.. 9 1 2.. 0 5 0	—Mar. 1863
10000	Lusitanian (of Portugal) [S.E.]	2 0 0.. 2 ..	..	..	.. 0 19 9.. 0 1 0	—Feb. 1862
103815	Mariquita and New Granada [S.E.]	1 0 0.. — ..	⅝ ¾	..	.. 0 9 6.. 0 1 6	—July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0.. 1¼ ..	1½ 1⅝	..	.. 0 8 6.. 0 2 6	—Jan. 1863
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0.. 57 ..	53 55	..	.. 54 15 0.. 4 0 0	—Dec. 1862
45174	Unit. Mexican (sil.), Mexico [S.E.]	Av. 38 5 0..	7¼ ..	6½ 7	.. 2 2 0.. 0 7 6	—May, 1863
30000	West Canada Mining Company [L.]	1 0 0.. — ..	..	..	.. 0 2 0.. 0 2 0	—Nov. 1862

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Aiten and Quenangen Uni. (cop.) [L. £5]	4 10 0..	— ..	..	.. 4 5 0.. 0 15 0	—Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0..	— ..	..	.. 15 per cent.	—May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0..	3 ..	..	.. 1 0 0.. 1 0 0	—June, 1855

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos [L. £2]	0 10 0..	— ..	⅛ ¼	..
20000	Australian (copper), South Australia [S.E.]	7 7 6..	1¾ ..	1 1¼	..
20000	Beariz Tin Streaming Company [L. £1]	0 12 6..	— ..	..	..Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	1 0 0..	⅜ ..	..	..Feb. 1863
15000	Cape Copper Mining Company [L. £10]	2 0 0..	— ..	2½ 2¾	..
25000	Capula (silver), Mexico [L. £2] [S.E.]	0 10 0..	⅝ ..	⅝ ⅝	..Jan. 1863
17000	Central Italian (copper) [7000 £2 paid]	0 6 0..	— ..	..	..Jan. 1862
60000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6..	— ..	..	..Jan. 1859
10000	Copiapo Smelting [L.], Chili	10 0 0..	— ..	..	..July, 1862
100000	Don Pedro North Del Rey (gold), Brazil [L. £1] [S.E.]	0 10 0..	1¼ ..	⅞ 1⅛	..Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0..	⅛ ..	⅛ ¼	..Aug. 1862
25000	East del Rey, Brazil [L. £3]	1 0 0..	1¼ ..	1 1¼	..Fully paid.
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 7 6..	— ..	..	..Sept. 1861
20000	Elbe Colliery Company [L.]	1 0 0..	— ..	..	..Mar. 1862
30000	Ellersile and Bardowie, Jamaica	0 18 0..	— ..	..	..Fully paid.
8000	English and Canadian Mining Company [L.]	5 0 0..	— ..	..	..July, 1859
45000	Fortune (copper), West Australia [L.]	2 0 0..	— ..	..	..Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0..	— ..	..	..Fully paid.
24000	Hindostan (copper), Bengal [L. £5]	3 0 0..	— ..	..	..June, 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0..	— ..	..	..Feb. 1863
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0..	— ..	..	..Fully paid.
10000	Karbitz Colliery Company [L.]	1 0 0..	— ..	..	..June, 1860
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0..	— ..	..	..Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	1 0 0..	— ..	..	..Fully paid.
2000	New Burra Burra (Australia)	2 0 0..	2½ ..	2¾ ..	..Fully paid.
60000	New Granada (gold), South America [S.E.]	5 0 0..	— ..	..	..Aug. 1862
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0..	— ..	..	..Fully paid.
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	1 0 0..	— ..	..	..Nov. 1858
50000	Nova Scotia (land and gold) [L. £3]	0 17 6..	— ..	..	..
18000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0..	⅜ ..	..	..Nov. 1862
17000	Quebrada (copper), Venezuela [L. £10]	0 15 0..	— ..	..	..April, 1862
60000	Santa Barbara (gold), Brazil [L. £1]	2 10 0..	— ..	..	..Dec. 1862
120000	Scottish Australian Mining Company [L. £1]	0 10 0..	— ..	..	..Mar. 1862
15000	South Europe Mining Company, Spain [L. £5]	0 12 6..	— ..	..	..
50000	St. John's United (copper, lead), Newfoundland [L.]	3 0 0..	— ..	..	..May, 1860
12000	Tepitz Colliery Co. [L. £5]	1 0 0..	— ..	..	..Fully paid.
30000	Vallanzasca (gold) [L. £1]	2 0 0..	— ..	..	..
16000	Vancouver (coal) [L. £10]	0 5 0..	— ..	⅝ ¾	..
45000	Victor Emanuel, Italy [L.]	5 0 0..	— ..	..	..
1000	Western Africa Malachite (copper) [L.]	1 0 0..	— ..	..	..Fully paid.
12000	Wheal Elias, South Australia [L.]	110 0 0..	— ..	..	..Oct. 1859
34525	Wheal Jamaica (copper)	5 0 0..	— ..	..	..Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0..	— ..	..	..Fully paid.
48000	Yudanamutana (copper), South Australia [L.] [S.E.]	1 0 0..	— ..	..	..Fully paid.
		3 0 0..	3¼ ..	3⅛ 3½	..Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merio.	1 10 0..	— ..	..	..
600	Aberffrwd (lead), Cardigan	0 10 0..	— ..	..	..
35000	Atlas Min. and Smelt. [L. £1]	0 15 0..	— ..	..	..Mar. 1863
4745	Alfred Con. (cop.), Phillack	4 18 5..	— ..	..	..April, 1863
6000	Bagtor [L. £2]	1 14 0..	— ..	..	..April, 1863
400	Baldwin, I. of Man [L. £5]	2 15 0..	— ..	..	..Mar. 1863
1624	Ballieswidden (tin), St. Just	14 8 7..	— ..	..	..Mar. 1862
10000	Bampfylde (copper), Devon	1 0 0..	— ..	..	..Aug. 1860
4000	Bedford Consols (copper)	2 6 0..	— ..	..	..Feb. 1863
2000	Berehaven (copper), Ireland	1 0 0..	— ..	..	..
400	Billins [L. £30] [200 £15 pd.]	30 0 0..	— ..	..	..April, 1863
1248	Boscaswell (tin, cop.), St. Just	6 15 0..	— ..	..	..Dec. 1860
2280	Bosscundle (tin, cp.), St. Austell	7 10 0..	— ..	..	..Sept. 1862
160	Bosorne & Bollowall, St. Just	6 5 0..	— ..	..	..Dec. 1860
5000	Bottle Hill (tin) Plympton	1 7 0..	14s. ..	10s. 12s.	..April, 1863
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 10 6..	— ..	..	..Mar. 1863
6000	British (tin & cop.), [L. £1 10s.]	0 12 0..	¾ ..	..	..
4000	Brookwood (cop.) Ashburton	1 12 6..	— ..	..	..No call.
112	Bron-Haulog (id.), Denbighsh.	20 0 0..	— ..	..	..
5120	Brynambor (id.), Cardi. [L. £5]	2 3 0..	— ..	..	..No call.
200	Brynford Hall (lead), Flint	25 0 0..	— ..	..	..Nov. 1862
500	Bryn Gwiog (lead), Flint	6 0 0..	30 ..	28 30	..April, 1862
1861	Bryntail, Llanidloes, Montgo.	7 14 6..	— ..	..	..May, 1863
8380	Buller and Basset Unit. (cop.)	4 1 6..	— ..	..	..Feb. 1863
1200	Burra Burra (cop.), Kenwyn	2 10 0..	— ..	..	..April, 1862
2200	Burren (lead, calamine) [L. £5]	5 0 0..	5¼ ..	..	..June, 1862
915	Calvadnack, Wendron (tin)	23 4 6..	8 ..	..	..Feb. 1863
1000	Camborne Consols (copper)	17 15 0..	— ..	..	..Feb. 1863
4600	Camborne Vean & Wh. Francis	8 14 4..	— ..	2 2¼	..Oct. 1862
75000	CambrianConsolid. (gd.) [L. £2]	1 0 0..	— ..	..	..Aug. 1862
914	Caradon Cons. (cop.), St. Cleer	26 4 6..	17½ ..	..	..Mar. 1863
4046	Caradon Hill (copper)	2 1 6..	— ..	..	..July, 1862
6000	Caradon United (copper)	0 10 0..	— ..	..	..Sept. 1862
10000	Caradon Vale (copper)	5 0 0..	— ..	..	..
10000	Cardigan Consols (lead & cop.)	— ..	— ..	..	..July, 1862
3580	Carmarthen United (lead)	5 0 0..	— ..	..	..Fully paid.
6000	Carn Camborne (copper)	0 13 6..	— ..	..	..April, 1863
4370	Carnewas (id., cop.), Mawgan	1 8 0..	— ..	..	..Nov. 1862
3000	Carn Vivian (tin, cop., lead)	2 1 6..	— ..	..	..Nov. 1861
2048	Carnyorth (tin), St. Just	4 0 0..	— ..	..	..Sept. 1862
20000	Carysfort [3200 £2½ pd., 16800 £1 pd.]	— ..	— ..	..	..
10000	Castleward, Ireland [L.]	1 0 0..	— ..	..	..Fully paid.
2500	Cefn Clicen (lead), Flintshire	2 1 0..	— ..	..	..Jan. 1863
2500	Central Minera (lead) [L. £5]	1 19 0..	— ..	..	..Oct. 1862
6000	Charlotte Untd., Perranuthnoe	3 14 1..	— ..	..	..May, 1863
4000	Clara Unit., Ponterwyd [L. £3]	1 14 6..	— ..	..	..April, 1863
787	Clijah & Wentworth (tin, cp.)	1 0 0..	— ..	..	..Mar. 1863
3170	Coed Mawr Pool (lead) [L.]	4 16 6..	— ..	..	..Jan. 1863
16000	Coolartra and Bond, Ireland	1 0 0..	— ..	..	..Sept. 1862
50000	Connorree (cop., sulph.)	[L.] 1 0 0..18s6d..		..	..Fully paid.
10000	Cornubia (tin) [7000 £2 paid, 3000 10s. paid]			..	..Oct. 1862
861	Crane (copper), Camborne	16 10 0..	25 ..	26 ..	..Mar. 1863
12000	Crelake (cop.), Tavistock	0 10 0..	— ..	..	..April, 1863
8000	Crookhaven (cop.) [L. £2½]	1 10 0..	— ..	..	..Oct. 1861
6000	Crowan Cons. (cop.) [L. £2]	0 15 0..	— ..	..	..Sept. 1862
2000	Crowlwm (lead), Llanidloes	1 10 0..	— ..	..	..No call.
6000	Cuddra (cop., tin), St. Austell	3 13 0..	— ..	..	..Feb. 1863
1800	Cwmbrane, Carmar. [L. £3]	2 0 0..	— ..	..	..Feb. 1862
30000	Dale, N. Staf. [L.] [21000 £1 pd., 9000 7s. 6d. pd.]			..	..Sept. 1862
2000	Deep Level, Minera [L. £5]	3 5 0..	— ..	..	..Feb. 1862
12000	Devon Union (copper) [L.]	1 0 0..	— ..	..	..Fully paid.
4566	Devon Wheal Buller (copper)	4 10 0..	— ..	..	..Aug. 1862
20000	Dolfrw-y-nog (gold) [L. £1]	0 10 0..	⅞..	⅝ ⅞	..Sept. 1862
1000	Durlo (tin), Lelant	8 2 0..	— ..	..	..Oct. 1862
5000	Dulta (tin) [L.]	1 0 0..	— ..	..	..Fully paid.
1000	Eaglebrook (lead) [L. £20]	16 0 0..	— ..	..	..Feb. 1863
600	East Abraham (copper)	2 10 0..	— ..	..	..Mar. 1863
4096	East Alfred Consols (copper)	6 5 10..	— ..	..	..Dec. 1862
3000	E. Beam (tin), St. Aus. [L. £2]	1 7 0..	— ..	..	..Mar. 1863
4096	East Brookwood (copper)	1 7 6..	— ..	..	..Jan. 1863
5000	E. Bronfloyd (sil.-id.) Card. [L]	2 0 0..	— ..	..	..
6000	East Carn Brea (cop.) Redruth	3 15 0..	8½ ..	7¼ 7¾	..Feb. 1863
2000	East Chiverton (lead)	1 0 0..	— ..	5 5½	..
50000	E. Clogau (gold), Merio. [L. £1]	0 5 0..	— ..	..	..May, 1862
6400	East Crinnis and South Par.	2 14 0..	— ..	..	..May, 1862
6000	East Damsel (cop.), Gwennap	1 11 0..	— ..	..	..Mar. 1862
4000	East Devon Gt. Consols (cop.)	1 9 0..	— ..	..	..Jan. 1863
1200	East Dyliffe (lead) [L. £5]	3 0 0..	4½ ..	4 4½	..April, 1863
2048	E. Falmouth (s.-id.), Kenwyn	4 0 6..	— ..	..	..Mar. 1863
6000	E. Grenville (cop.), Camborne	1 14 0..	47s. ..	..	..May, 1863
4000	E. Gunnis Lake & S. Bedf. (cp.)	7 3 6..	— ..	..	..April, 1863
8145	East Jane (sil.-id.), Cardinham	1 13 0..	— ..	..	..April, 1863
1024	E. Margaret (tin), Uny Lelant	18 5 0..	— ..	..	..Jan. 1863
6000	East Martha [L. £2 10s.]	1 5 0..	— ..	..	..May, 1863
8000	E. Polberro, St. Agnes [L.]	0 10 0..	— ..	..	..May, 1861
4096	E. Providence (tin), Uny Lel.	2 12 4..	— ..	..	..Mar. 1863
6000	E. Rosewarne (cp., tin), Gwin.	2 15 0..	— ..	..	..Sept. 1862
5610	East Seton (cop.), Camborne	0 8 0..	— ..	..	..April, 1863
256	East Tolgus (copper), Redruth	82 0 0..	— ..	..	..Feb. 1863
1024	E. Treskerby (cop.), Redruth	6 17 6..	3½ ..	3 3½	..Mar. 1863
1190	E. Wheal Agar (cop.), St. Cleer	11 2 0..	— ..	..	..Mar. 1863
1300	East Wheal Ellen, St. Agnes	2 0 6..	— ..	..	..
2000	East Wheal Fortune (tin)	1 0 0..	— ..	..	..April, 1863
2048	East Wheal Grylls (tin, cop.)	0 10 0..	— ..	..	..
2048	E. Wh. Lovell (tin), Wendron	2 13 6..	— ..	..	..
4000	E. Wh. Russell, Tavis. [S.E.]	8 1